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YAMAGATA (THAILAND) Co., Ltd. Work Instruction	Doc. No. WI-ES-13	Doc. Name : Hazardous Chemical Substances Standard Control		DAR. No. / เลขที่ DAR 099/25	Eff. Date/วันที่มีผลบังคับใช้ 19-Nov-2025	
Process Name /ชื่อขั้นตอน : **ควบคุมสารเคมีอันตราย ใน วัตถดิบ/ ผลิตภัณฑ์ / บรรจภัณฑ์**	Prod. Name/ชื่อสินค้า **All**	Special Characteristic/ คุณลักษณะพิเศษ	-	Ref. เอกสารอ้างอิง ข้อกำหนดลูกค้า , RoHS, SVHC ,GADSL	Rev . 37	Page หน้า 1/130
Prod. No./หมายเลขสินค้า -	Customer/ชื่อลูกค้า -					

อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)

ถุงมือผ้า	ที่อุดหู	หมวกนิรภัย	ผ้าปิดจมูก	กระบังหน้ากันสะเก็ด	ปลอกยางสวมนิ้ว
ถุงมือยาง	ที่ครอบหู	รองเท้านิรภัย	หน้ากากกรองสารเคมี	แว่นตากันสะเก็ด	เข็มขัดพยุงหลัง
		ปลอกแขน	กระบังหน้ากรองแสง	เข็มขัดนิรภัย	เอี๊ยม

1. วัตถุประสงค์

เพื่อเป็นคู่มือในการควบคุมการปนเปื้อนสารเคมีต้องห้าม และสารเคมีอันตรายที่มีผลกระทบต่อสิ่งแวดล้อม ตามประกาศของสหภาพยุโรปว่าด้วยการจำกัดการใช้สารเคมีอันตรายในอุปกรณ์ไฟฟ้า,อิเลคทรอนิคส์ และยานยนต์ เช่น กฎหมาย, Customer requirement, Rohs, REACH (SVHC), EHS เป็นต้น

2.ขอบเขต

วัตถุดิบที่ต้องควบคุม และตรวจสอบหาปริมาณสารต้องห้ามตามข้อกำหนดลูกค้า / กฎหมายที่เกี่ยวข้อง มีดังนี้

วัตถุดิบหลัก เช่น หมึก (Ink) , กระดาษ (Paper), ลวด (Stitching Wire), กาว(Glue) ,น้ำยาเคลือบกระดาษ, เพลท (Plate)

วัตถุดิบรอง / สนับสนุนการผลิต เช่น - น้ำยาที่ใช้ในการทำงานสะอาดเครื่องจักร (Cleaning) และบรรจุภัณฑ์ (packaging) และอื่น

3. ข้อกำหนด และ ระดับในการควบคุม

บริษัทฯ กำหนดให้มีการจำแนกระดับในการควบคุมปริมาณในการใช้ เป็น 3 ระดับดังนี้

- Rank A คือ Banned : ห้ามนำมาใช้งาน
- Rank B คือ Restricted Use : สารที่ต้องมีการยับยั้งการใช้งาน และได้กำหนด ยกเลิกการใช้ ระยะเวลา / แผนงานในการยกเลิกการใช้งานไว้เป็นที่แน่นอน
- Rank C คือ Controlled : สารที่ต้องมีการควบคุมการใช้งานและเฝ้าระวังในการใช้

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Process Name /ชื่อขั้นตอน : **ควบคุมสารเคมีอันตราย ใน วัตถดิบ/ ผลิตภัณฑ์ / บรรจภัณฑ์**	Prod. Name/ชื่อสินค้า All	Special Characteristic/ คุณลักษณะพิเศษ	-	Ref. เอกสารอ้างอิง ข้อกำหนดลูกค้า , RoHS, SVHC ,GADSL	Rev . 37	Page หน้า 2/130
Prod. No./หมายเลขสินค้า -	Customer/ชื่อลูกค้า -					

อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)					
○ หมวกนิรภัย	○ ผ้าปิดจมูก	○ กระบังหน้ากันสะเก็ด	○ ปลอกยางสวมนิ้ว		
○ ถุงมือผ้า	○ ที่อุดหู	○ รองเท้านิรภัย	○ หน้ากากกรองสารเคมี	○ แว่นตากันสะเก็ด	○ เข็มขัดพยุงหลัง
○ ถุงมือยาง	○ ที่ครอบหู	○ ปลอกแขน	○ กระบังหน้ากรองแสง	○ เข็มขัดนิรภัย	○ เอี๊ยม

บริษัท ฯ ได้จำแนกรายการสารเคมี ในการควบคุม ให้สอดคล้องกับข้อกำหนดลูกค้า กฎหมายดังนี้

ตารางที่ 1 กฎหมายด้านสิ่งแวดล้อม , RoHS และข้อกำหนดของลูกค้า

ตารางที่ 2 สารเคมีที่ต้องเฝ้าระวังเป็นอย่างยิ่งตามระเบียบ REACH (SVHC)

ตารางที่ 3 สารเคมีที่ควบคุมในกลุ่มยานยนต์ (Automotive)

ตารางที่ 4 เป็นสารเคมีที่ต้องควบคุมในกระบวนการผลิต

4. ข้อกำหนดทางด้านเอกสาร

เอกสารที่จะต้องทำการตรวจสอบมีดังต่อไปนี้

- MSDS (Material safety data sheet) และ EHS report
- Test report ผลการตรวจสอบโลหะหนักที่ใช้อ้างอิงในการตรวจสอบการรับวัตถุดิบ (ICP data)
- กรณีสงสัย ด้านสารเคมี ให้ติดต่อแผนก ISO สารเคมี/วัตถุดิบทุกตัวต้องผ่านการตรวจสอบความสอดคล้องด้านสารเคมี ตามข้อกำหนดลูกค้าก่อนอนุมัตินำมาทอลอง /ใช้งาน

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				2) Less than 100 ppm. in homogeneous materials	2) Sum of Cadmium, Hexavalent chromium, Lead and Mercury do not exceed than 100 ppm by weight as impurity in homogeneous material. Note: A metal converted value applies to the concentration for the target
2	Lead and its compounds. Lead cobonate , Lead sulfate	-	A	1) Less than 50 ppm of lead in homogeneous materials 2) Less than 300 ppm. in surface coating material with thermoset or thermoplastic coating , the polyvinyl chloride coating of PVC wire.	
3	Hexavalent chromium (Chromium VI)and its compounds.	-	A	1) Less than 1000 ppm. of total Chromium VI in the homogenous material.	
4	Mercury and its compounds	-	A	1) Less than 1000 ppm. of the mercury(Hg) in the homogeneous	

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				material.	
5	Polybrominated biphenyls (PBBs)	-	A	1) Less than 100 ppm for resin (including Rubber / Film) 2) Less than 1,000 ppm in homogeneous material	Less than 1,000 ppm. in the homogeneous material.
6	Polybrominated diphenylethers (PBDEs)	-	A	1) Less than 100 ppm for resin (including Rubber / Film) 2) Less than 1,000 ppm. in homogeneous material. 3.) Intentionally added or 0.001 wt% (10 ppm) in article or mixture	Less than 1,000 ppm. in the homogeneous material.
7	Dibutyl phthalate (DBP)	84-74-2	A	1) Less than 300 ppm for Inks 2) Less than 1,000 ppm. in homogeneous material.	Less than 1,000 ppm in packaging items such as printed materials, instruction manuals
8	Benzyl butyl phthalate (BBP),	85-68-7	A		

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9	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	A		
10	Di isobutyl phthalate (DIBP)	84-69-5	A		
11	Polychlorinated biphenyls (PCBs) and specific substitutes. DBBT (monomethyl-dibromo-dipheney methane) DBB	76253-60-6 81161-70-8 99688-47-8 75113-37-0 1336-36-3	A	1) Intentionally added or 0.00002 wt% (0.2 ppm) in article or mixture 2) Less than 50 ppm (0.005% by weight) in homogeneous materials	1) Intentionally added or 0.00002 wt% (0.2 ppm) in article or mixture 2) Less than 50 ppm in homogeneous materials for PCT only
12	Polychlorinated naphthalenes (Radioactive substances) (PCNs)	-	A	1.)Intentionally added.	1.)Intentionally added.
13	Polychlorinated terphenyls (PCTs)	-	A	1) Intentionally added or 0.0002 wt% (2 ppm) in article or mixture	1) Intentionally added or 0.0002 wt% (2 ppm) in article or mixture
14	Short Chain Chlorinated Paraffin (SCCPs ,C10-13),		A	1) Intentionally added	1) Less than 1,000 ppm as packaging items

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	, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8		2) Less than 1,000 ppm of the article, materials/parts	
	Alkanes, C6-18, chloro	68920-70-7			
	Alkanes, C12-13, chloro	71011-12-6			
	Alkanes, C12-14, chloro	85536-22-7			
	Alkanes, C10-14, chloro	85681-73-8			
	Alkanes, C10-12, chloro	108171-26-2			
	Remark : For CAS No Refre data ChemSHERPA data (LR05 POPs)				
15	Polyvinyl chloride (PVC), PVC Copolymers, PVC blends.	9002-86-2 7723-14-0	A	1.) Intentionally added. 2) Chlorine content less than 1,000 ppm in plastic material.	1) Chlorine content less than 1,000 ppm. in packaging materials. 2.) Ban PVC sheet/film in Packaging product.

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	Red Phosphorus			3) Less than 1,000 ppm in parts	
16	Specific Organic tin compoun			1) Intentionally added 2) Less than 1,000 ppm. of tin in a part, as impurity in homogeneous materials.	1) Intentionally added 2) Inclusion of less than 1,000 ppm as impurity in packaging items
	16.1) Tributyl tin oxide (TBTO)	56-35-9	A		
	16.2) Tri-substituted organostannic compounds	-	A		
	16.2.1Tributyltin (TBT) compounds	688-73-3	A		
	16.2.2Triphenyltin (TPT) compounds	-	A		
	- Triphenyltin hydride,	892-20-6	A		
	- Triphenyltin hydroxide	76-87-9	A		
	- Triphenyltin chloride	-	A		
	- Triphenyltin acetate.	-	A		
	16.3) Dibutyltin (DBT) compounds	-	A		

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	16.4) Dioctyltin (DOT) compounds	-	A		
17	Asbestos	-	A	1) Intentionally added	1) Intentionally added
18	Formaldehyde	50-00-0	A	1) Intentionally added in wooden products made from fiberboard, plywood. Less than 75 ppm. for textile.	Packaging products are control in Rack C
19	Specific Benzotriazole 2-benzotriazol-2yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	A	1) Intentionally added	1) Intentionally added
20	20.1.)Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1- dimethlethyl),			1) Intentionally added	
	20.2-(3',5'-Di-tert-butyl-2'hydroxyphenyl) benzotriazole .				
21	Dimethyl fumarate (DMF)	624-49-7	A	1) Intentionally added 2) Less than 0.1 ppm in part or homogeneous material.	1.) Intentionally added 2) Less than 0.1 ppm in part or homogeneous material.

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22	Beryllium Oxide (BeO)	1304-56-9	A	1) Intentionally added 2) Less than 100 ppm in part or homogeneous material.	1) Intentionally added 2) Less than 100 ppm in part or homogeneous material.
23	Cobalt dichloride ($CoCl_2$)	7646-79-9	A	1.)Intentionally added, Less than 1000 ppm article	
24	Ozone depleting substance (ODS)	-	A	Intentionally added	Intentionally added
	(CFC ,Halon,Carbon tetrachloride and 1,1,1-Trichloroethane)	-			
	- CFC-11:trichlorofluoromethane	75-69-4			
	- CFC-12:dichlorofluoromethane	75-71-8			
	- CFC-113:trichlorofluoromethane	76-13-1			
	- CFC-114:dichlorotetrafluoromethane	76-14-2			
	- CFC-115:ichloropentafluoromethane	76-15-3			

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	- Halon-1211:romochlorodifluoromethane.	353-59-3			
	- Halon-1301:bromotrifluoromethane	75-63-8			
	- Halon-2402:dibromotetrafluoroethane	124-73-2			
	- CFC-13;chlorotrifluoromethane.	75-72-9			
	- CFC-111;pentachlorofluoroethane	354-56-3			
	- CFC-112-tetrachlorodifluoroethane	76-12-0			
25	Ozone depleting substance (ODS)		A	Intentionally added	Intentionally added
	(CFC ,Halon,Carbon tetrachloride and 1,1,1-Trichloroethane)	-			
	- CFC-211;heptachlorofluoropropane	422-78-6			
	- CFC-212;hexachlorofluoropropane	3182-26-1			
	- CFC-213;pentachlorotrifluoropropane	2354-06-5			

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	- CFC-214;tetrachlorotetrafluoropropane	29255-31-0			
	- CFC-215;trichloropentafluoropropane	4259-43-2			
	- CFC-216;dichlorohexafluoropropane	661-97-2			
	- CFC-217;chloroheptafluoropropane	422-86-6			
	- Carbon tetrachloride; tetrachloromethane	56-23-5			
	- 1,1,1-Trichloroethane;methyl chloroform	71.55-6			
	Hydrochlorofluorocarbons (HCFC)	-			
26	Methyl bromide	74-83-9	A	-	Intentionally added
27	Perfluorooctane sulfonate (PFOS)	307-35-7	A	1) Intentionally added or 0.0000025 wt% (25 ppb) of PFOS including its salts in article or mixture	

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	PFOS-related compounds	-	A	Intentionally added or 0.0001 wt% (1 ppm, 1000 ppb) of one or a combination of PFOS-related compounds, in article or mixture	
28	Dioxins	-	A	Intentionally added	
29	Tris(2,3-dibromopropyl) phosphate Tris (azirldinyl) phosphinoxide	-	A	Banned use in flame retardant.	
30	Halogenated flame retardants compounds and halogen resins	-	A	Intentionally added or 0.1 wt% (1000 ppm) of each halogen element in homogeneous material	Intentionally added or 0.1 wt% (1000 ppm) of each halogen element in homogeneous material
31	Arsenic compounds.	-	A	Less than 100 ppm in part / materials	
	- Diarsenic trioxide	1327-53-3			
	- Diarsenic pentoxide	1303-28-2			

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	- Arsenic	7440-38-2			
	-Chromated copper arsenate (CCA)	37337-13-6			
	-Triethyl arsenate	1303-28-2			
	-Trielead diarsenate	1327-53-3			
	-Calcium arsenate	15606-95-8			
		3687-31-8			
		7778-44-1			
32	Hexabromocyclododecane (HBCDD)	25637-99-4	A	1) Intentionally added, 2) Less than 75 ppm in article	
		4736-49-6			
		65701-47-5			
		138257-17-7			
		138257-18-8			

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		138257-19-9			
		169102-57-2			
		678970-15-5			
		678970-16-6			
		678970-17-7			
	1,2,5,6,9,10-hexabromocyclododecane	3194-55-6			
	α-hexabromocyclododecane	134237-50-6			
	β-hexabromocyclododecane	134237-51-7			
	γ-hexabromocyclododecane	134237-52-8			
33	Dodecachloropentacyclo [5.3.0.0(2,6).0(3,9).0(4,8)] decane (also known as Mirex)	2385-85-5	A	Intentionally added	
34	Hexachlorobenzene (HCB)	118-74-1	A	Intentionally added	
35	Hexachlorobutadiene (HCBD)	87-68-3	A	Intentionally added	
36	Hexachlorocyclohexane	-	A	Intentionally added	

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อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)

ถุงมือผ้า	ที่อุดหู	รองเท้านิรภัย	หน้ากากกรองสารเคมี	แว่นตากันสะเก็ด	เข็มขัดพยุงหลัง
ถุงมือยาง	ที่ครอบหู	ปลอกแขน	กระบังหน้ากรองแสง	เข็มขัดนิรภัย	เอี๊ยม

37	Perfluorooctanoic acid (PFOA) and individual salts and esters of PFOA	335-67-1 3825-26-1 335-95-5 2395-00-8 335-93-3 335-66-0 376-27-2 3108-24-5	A	1 Intentionally added and 1mg/m^2 (as sum of PFOA) in the material and part. 2)Less than 1,000 ppm is contained in parts. 3.) Less than 10ppm is contained in chemicals	1 Intentionally added and 1mg/m^2 (as sum of PFOA) in contained in fibers, carpets and other coated packaging items. 2)Less than 1,000 ppm is contained in parts. 3.) Less than 10ppm is contained in chemicals. *For application are Photographic coatings for film and paper or screen , deadline is December 31, 2014 *All products delivered to Canon is December 31, 2015
38	Azocolourants and azodyes which form certain aromatic amines . (Specific Azo,Amines)		A	1) Intentionally added	-

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4-amino diphenyl	92-67-1	2) Less than 30 ppm in **Prohibited substances for Leather / Textile productsonly**	
benzidine	92-87-5		
4-chloro-o-toluidine;4-chloro-2-methylaniline	95-69-2		
2-napthylamine	91-59-8		
o-aminoazotoluene	97-56-3		
2-amino-4-nitrotoluene;5-nitro-o-toluidine	99-55-8		
p-chloroaniline	106-47-8		
2,4-diaminoanisole	615-05-4		
4,4'-diaminodiphenylmethane, 4,4’-methylenedianiline	101-77-9		

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3,3'-dichlorobenzidine	91-94-1
3,3'-dimethoxybenzidine	119-90-4
3,3'-dimethylbenzidine	119-93-7
3,3'-dimethyl-4,4'-diaminodiphenylmethane	838-88-0
4,4'-diamino-3-3’-diphenylmethane.	838-88-0
p-cresidine;6-methoxy-m-toluidine	120-71-8
4,4'-Methylenebis-(2-chloroaniline)	101-14-4
4,4'-Oxydeaniline	101-80-4
4,4’-thiodianiline; 4,4’-diaminodiphenylsulfide.	139-65-1
o-toluidine	95-53-4
2,4-toluylenediamine; 4-methyl-m-phenylenediamine	95-80-7
2,4,5-trimethylaniline	137-17-7

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	o-anisidine	90-04-0			
	4-aminoazobenzene	60-09-3			
39	Benzene	71-43-2	A	Less than 1000 ppm	-
40	Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl), 2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenyl	3846-71-7	A		Intentionally added
41	2,4,6-Tri-tert-butylphenol	723-26-3	A	Intentionally added	
42	Aldrin	309-00-2	A	Intentionally added	-
	Endrin	72-20-8			
	Dieldrin	60-57-1			
43	Yellow phosphor	12185-10-3	A	Intentionally added	-
44	Chlordane	57-74-9		Intentionally added	-
	Heptachlor	76-44-8	A		

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45	N,N'-ditolyl-p-phenylenediamine	27417-40-9	A	Intentionally added	-
	N-tolyl-N'-xylyl-p-phenylenediamine	70290-05-0			
	N,N'-dixylyl-p-phenylenediaminemine	28726-30-9			
46	1,1,1-trichloro-2,2-bis(4-chlorophenyl) ethane (DDT)	50-29-3	A	Intentionally added	-
47	Toxaphene	8001-35-2	A	Intentionally added	-
48	4-nitrodiphenyl and its salt	-	A	Intentionally added	-
49	Bis(chloromethyl) ether	542-88-1	A	Intentionally added	-
50	Kelthane or Dicofol	115-32-2	A	Intentionally added	-
51	Hexachlorocyclohexane	-	A	Intentionally added	-
52	Decachloropentacyclo or Clordecone	143-50-0	A	Intentionally added	-
53	Tris(2-chloroethyl) phosphate (TCEP),	115-96-8	A	Less than 1000 ppm of the article	Inclusion of less than 1,000 ppm in packaging items (However, use of the substance in timber as antiseptic agent is prohibited.)
	Tris (1-chloro-2-propyl) phosphate (TCPP)	13674-84-5			

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	,Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	13674-87-8			
54	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	A	Prohibited in amounts exceeding 1000 ppm per delivery configuration (Parts, units, finished products, etc.)	-
55	Benzenamine, N-phenyl-,reaction products with styrene and 2,4,4-trimethylpentene (BNST)	68921-45-9	A	1) Intentionally added	1) Intentionally added
56	Nickel and its compounds.	-	A	1.) Part and materials for mobile phone where prolonged skin release concentration less than 0.5 mg/cm^2	1) Intentionally added
57	Polycyclic aromatic hydrocarbons (PAH)		A	Less than 1 ppm. of the of the plastic or rubber part that come into direct, prolonged or repetitive skin or oral cavity contact .	-
	Benzo[e]pyrene (BeP)	192-97-2			
	Benzo[j]fluoranthene (BjFA)	205-82-3			
	Benzo[b]fluoranthene (BbFA)	205-99-2			

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	Benzo[k]fluoranthene (BkFA)	207-08-9			
	Chrysene (CHR)	218-01-9			
	Benzo[a]pyrene (BaP)	50-32-8			
	Dibenzo[a,h]anthracene (DBahA)	53-70-3			
	Benzo[a]anthracene (BaA)	56-55-3			
58	Trichloroethylene	79-01-6	A	Less than 1000 ppm	-
59	Phthalate Esters, Phthalate group	-	A	Less than 1000 ppm for plasticizer, dye, pigment, paint, ink, adhesive, lubricant, toy and childcare	-
	66.1) Diisononyl phthalate (DINP)	28553-12-0 ,		1) Less than 1000 ppm of the parts.material of children's toy or chind care article.	1. Intentionally added

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		68515-48-0		2) Less than 1000 ppm as a sum of DINP, DIDP and DNOP in homogeneous materials. 3) Unintentional use for DIDP. 4.) All application such as packaging other than the above is	2. Inclusion of less than 1,000 ppm in packaging items
	66.2) Di-isodecyl phthalate (DIDP)	26761-40-0 68515-49-1			
	66.3) Di-n-octyl phtalate (DNOP),	117-84-0			
	66.4) Di-n-hexyl phthalate (DNHP)	84-75-3			
60	1,2-Benzenedicarboxylic acid, 67.1)di-C7-11-branched and linear alkyl esters (DHNUP)	68515-442-4	A	Less than 1000 ppm of the parts	Less than 1,000 ppm in packaging items.
	67.2) 1,2-Benzenedicarboxylic acid, Di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	A	Less than 1000 ppm of the parts	Less than 1,000 ppm in packaging items.

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	67.3) Diisopentylphthalate (DIPP)	605-50-5	A	Less than 1000 ppm of the parts	Inclusion of less than 1,000 ppm in packaging items
	67.4) 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	A	Less than 1000 ppm of the parts	Inclusion of less than 1,000 ppm in packaging items
	67.5) N-pentyl-isopentylphthalate	776297-69-9	A	Less than 1000 ppm of the parts	Inclusion of less than 1,000 ppm in packaging items
	67.6) Bis (2-methoxyethyl) phthalate (DMEP)	117-82-8	A	Less than 1000 ppm of the parts	Less than 1000 ppm in packaging
	67.7) Dipentyl phthalate (DPP)	131-18-0	A	Less than 1,000 ppm in parts	Inclusion of less than 1,000 ppm in packaging items
	67.8) 1,2-Benzeneddicarboxylic acid,dihexylester,branched and linear	68515-50-4	A	Less than 1,000 ppm in parts	Less than 1,000 ppm in parts
61	N,N-dimethylacetamide (DMAC)	127-19-5	A	Unintentional use 3000 ppm	Less than 1000 ppm in packaging items
62	N,N-Dimethylformamide and formamide compound	68-12-2	A	Unintentional use Less than 3000 pm in parts	
63	1-methyl-2-pyrrolidone,N-methyl-2-pyrrolidone (NMP)	872-50-4	A	Intentionally added Less than 3000 pm in parts	
64	Fluorinated greenhouse gases (PFC, SF_6,	-	A	Intentionally added	-

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	Hydrofluorocarbon (HFC))				
65	Long-chain (C9-C21) perfluorocarboxylic acids (PFCAs) and its salts and related substances		A	Intentionally added	
66	Decabromodiphenylethane (DBDPE) Benzene, 1,1'-(1,2-ethanediyl)bis-, brominated	84852-53-9 1092834-40-6	A	・Intentionally added (1) ・0.001% by weight (10ppm) for DBDPE In a substance or a mixture ・0.001% by weight (10ppm) for DBDPE in an article	
67	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene (“Dechlorane Plus”™)		A	0.0001 wt% (1 ppm 1000 ppb) in article or mixture	
68	PIP(3:1) (phenol, isopropylated phosphate (3:1)	68937-41-7	A	Intentionally added or 0.1 wt% (1000 ppm) of article or mixture	
69	Polybutylene Terephthalate (PBT)	24968-12-5	A	Intentionally added	

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70	Long-chain perfluoroalkyl carboxylate (LC-PFACs) and perfluoroalkyl sulfonate chemicals 1.Perfluorooctyl iodide 2.Tetrahydroperfluoro-1-decanol 3.Tetrahydroperfluoro-1-decanol 4.Perfluorodecyl iodide 5.1,1,2,2-Tetrahydroperfluorododecyl iodide 6.Perfluorodecylethyl acrylate 7.1,1,2,2-Tetrahydroperfluorodecyl acrylate 8.1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-Pentacosafluoro-14-iodotet 9.3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-Pentacosafluorotetra decan-1-ol 10.3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-Nonaco safluorohexadecan-1-ol 11.1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-Nonacosafluor o-16-iodohexadecane	 507-63-1 678-39-7 865-86-1 2043-53-0 2043-54-1 17741-60-5 27905-45-9 30046-31-2 39239-77-5 65510-55-6 68187-47-3	A	Intentionally added	

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	12. Sodium;2-methylpropane-1-sulfonate 13. 1,1,2,2-Tetrahydroperfluoroalkyl (C8-C14) alcohol 14. 1,1,2,2-Tetrahydroperfluoroalkyl (C8-C14) alcohol 15. Silicic acid (H4SiO4), sodium salt (1:2), reaction products with chlorotrimethylsilane 16. Thiols, C4-20, gamma-omega-perfluoro, telomers with acrylamide and acrylic acid, 17. 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N- (2-((gamma-omega-perfluoro-C4-20-alkyl)thio)acetyl) derivs., inner salts 18. Polyfluoroalkyl betaine (generic) 19. Modified fluoroalkyl urethane (generic) 20. Perfluorinated polyamine (generic)	68391-08-2 70969-47-0 125476-71-3 1078712-88-5 1078715-61-3			
71	Pentachlorothiophenol (PCTP)	133-49-3	A	Intentionally added	Intentionally added
72	2,4,6-Tris(tertbutyl) phenol (TTBP)	732-26-3	A	Intentionally added	
73	Chlorinated phenols (PCP) Pentachlorophenoland its salts and esters		A	Intentionally added or 0.0005 wt% (5 ppm) in article or mixture	

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74	Perfluorohexane-1- sulphonic acid (PFHxS), its salts and PFHxS-related substances		A	Intentionally added or0.0000025 mass% (25ppb) ofPFHxS including its salts inarticle or mixture a	Intentionally added or0.0000025 mass% (25ppb) ofPFHxS including its salts inarticle or mixture a
75	Long-chain perfluoroalkyl TSCA Priority chemicals			Intentionally added.	Intentionally added.
	Methylene Chloride	75-09-2	A		
	1-Bromopropane	106-94-5	A		
	Cyclic Aliphatic Bromide Cluster (HBCD)	25637-99-4 3194-55-6 3194-57-8	A		
	Asbestos	1332-21-4	A		
	Carbon Tetrachloride	56-23-5	A		
	1,4-dioxane	123-91-1	A		
	N-Methylpyrrolidone (NMP)	872-50-4	A		
	Perchloroethylene	127-18-4	A		
	Pigment Violet 29	81-33-4	A		
	Trichloroethylene (TCE)	79-01-6	A		

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76	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	A	Intentionally added / 0.0001 wt% (1 ppm) in article or mixture	Intentionally added /0.0001 wt% (1 ppm) in article or mixture
77	Mineral oil aromatic hydrocarbons (MOAH) comprising 1 to 7 aromatic rings Mineral oil aromatic hydrocarbons (MOAH) comprising 3 to 7 aromatic rings	-	A	Less than 0.0001 %(1 ppm) by mass	Less than 0.0001 % (1 ppm) by mass
78	Mineral oil saturated hydrocarbons (MOSH) with 16 to 35 carbon atoms	-	A	Less than 0.1% (1000 ppm	Less than 0.1% (1000 ppm)
79	Perfluorohexane acids (PFHxA)and its salts	-	A	0.0000025 mass%(25ppb) of PFHxA including its salts in article or mixture	0.0000025 mass%(25ppb) of PFHxA including its salts in article or mixture
80	PFHxA-related substances	-	A	0.0001 mass%(1000ppb) of one or combination of PFHxA-related substances, in article or mixture	0.0001 mass%(1000ppb) of one or acombination of PFHxA-related substances, in article or mixture

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81	Perfluorocarboxylic acids (PFCAs) C9-C14 and its salts	-	A	0.0000025 wt% (25 ppb) of PFCAs including its salts in article or mixture	0.0000025 wt% (25 ppb) of PFCAs including its salts in article or mixture
82.	Long-chain (C9-C21)		A	Intentionally added	
83	Medium-chain chlorinated paraffins (MCCPs)		A	Less than 0.1 mass%(1000ppm) inhomogenous material	Less than 0.1 mass%(1000ppm) inhomogenous material
	Alkanes, C14-17, chloro	85535-85-9			
	Alkanes, C14-16, chloro	1372804-76-6			
	Tetradecane, chloro derivs.	198840-65-2			
84	Tetrabromobisphenol A (TBBPA)	79-94-7	A	Less than 0.1 mass%(1000ppm) inhomogenous material	Less than 0.1 mass%(1000ppm) inhomogenous material
85	Per-and polyfluoroalkyl substances(PFAS)	'-	A	Presence prohibited in concentrations equal to or greater than 25 ppb as individual substance in	Presence prohibited in concentrations equal to or greater than 25 ppb as individual substance in individual materials

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				individual materials	
86	Pentachlorobenzene	608-93-5	A	Intentionally added	Intentionally added
87	Alpha hexachlorocyclohexane	319-84-6	A	Intentionally added	Intentionally added
88	Beta hexachlorocyclohexane	319-85-7	A	Intentionally added	Intentionally added
89	Gamma hexachlorocyclohexane	58-89-9	A	Intentionally added	Intentionally added
90	Endosulfan	115-29-7 959-98-8 33213-65-9	A	Intentionally added	Intentionally added
91	Pentachlorophenol or its salts and esters	87-86-5	A	1)Intentionally added 2) 0.0005% by weight (5ppm) for Pentachlorophenol and its salts and esters in a mixture or an article	Intentionally added

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92	Hexabromobiphenyl	36355-01-8, etc.	A	Intentionally added	Intentionally added
93	Bis(pentabromodiphenyl) ether (decabromodiphenyl ether;decaBDE)	1163-19-5	A	Intentionally added	Intentionally added
94	4,4’-sulfonyldiphenol (bisphenol S, BPS)	80-09-1	A	Intentionally added	Intentionally added
95	Bisphenols 4,4-isopropylidenediphenol (Bisphenol A) 4,4'-sulphonyldiphenol (Bisphenol S) 4,4'-(1-methylpropylidene)bisphenol (Bisphenol B) 2,2′-methylenediphenol(Bisphenol F) 4,4'-methylenediphenol(Bisphenol F) 4,4′-[2,2,2-Trifluoro-1-(trifluoromethyl)ethylidene] Bisphenol (Bisphenol AF) 2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol (Tetrabromobisphenol A;TBBPA) 4,4'-sulphonylbis[2,6-dibromophenol] (Tetrabromobisphenol S;TBBPS) 4,4'-isobutylethylidenediphenol 4,4'-Methylenebis(2,6-dimethylphenol)	 80-05-7 80-09-1 77-40-7 2467-02-9 620-92-8 1478-64-1 79-94-7 39635-79-5 6807-17-6 5384-21-4	A	Intentionally added	Intentionally added

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YAMAGATA (THAILAND) Co., Ltd. A member of YAMAGATA Group — Work Instruction	Doc. No. WI-ES-13	Doc. Name : Hazardous Chemical Substances Standard Control	DAR. No. / เลขที่ DAR 099/25	Eff. Date/วันที่มีผลบังคับใช้ 19-Nov-2025

Process Name /ชื่อขั้นตอน : **ควบคุมสารเคมีอันตราย ใน วัตถดิบ/ ผลิตภัณฑ์ / บรรจภัณฑ์**	Prod. Name/ชื่อสินค้า All	Special Characteristic/ คุณลักษณะพิเศษ -	Ref. เอกสารอ้างอิง ข้อกำหนดลูกค้า , RoHS, SVHC ,GADSL	Rev . 37	Page หน้า 33/130
Prod. No./หมายเลขสินค้า -	Customer/ชื่อลูกค้า -				

อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)

○ หมวกนิรภัย	○ ผ้าปิดจมูก	○ กระบังหน้ากันสะเก็ด	○ ปลอกยางสวมนิ้ว	○ ถุงมือผ้า	○ ที่อุดหู
○ รองเท้านิรภัย	○ หน้ากากกรองสารเคมี	○ แว่นตากันสะเก็ด	○ เข็มขัดพยุงหลัง	○ ถุงมือยาง	○ ที่ครอบหู
○ ปลอกแขน	○ กระบังหน้ากรองแสง	○ เข็มขัดนิรภัย	○ เอี๊ยม		

No.	Chemicals List	CAS No.	Rank	Criteria for Part / Materials	Criteria for Packaging (PKG.)
1	Radioactive Substances	-	C	Intentionally added	
2	Other Brominated Organic compound	-	C	1) Intentionally added	-
3	Boron and its compounds	-	C	1) Intentionally added	Inclusion of less than 1,000 ppm in packaging items
4	Boric acid and Specific Sodium borates	-	C	2) Less than 1000 ppm of the part.	Inclusion of less than 1,000 ppm in packaging items -
	Disodium tetraborate, anhydrous	-			
	Tetraboron disodium heptaoxide hydrate	-			
	Diboron trioxide	-			
	Perchlorates	-			
5	- Lithiam perchlorate	2151-71-3	C	Less than 0.006 ppm.(6 ppb.) of the product part. Less than 1000 ppm all uses	-
	Selenium and it's compound	-			

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6	Brominate flame retardant (BFR) - Other than PBBs, PBDEs, or HBCDD	-	C	Less than 1000 ppm. bromine content by weight in the laminate / plastic materials	-
7	Beryllium Copper	- -	C	Less than 1000 ppm. bromine content by weight in the laminate / plastic materials 1) Unintentional use	- -
8	Bismuth and it's compound	- -	C	2) Less than 100 ppm all use Less than 1000 ppm (0.1 wt%) all uses	- -
9	Other Chlorinated Organic compounds	-	C	1) Unintentional use 2) Less than 900 ppm chlorine content by weight in the laminate / plastic materials	-
10	77.'4-[4,4-bis(dimethyllamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammoniumchloride (C.I.Basic Violet3)	548-62-9	C	Less than 50 ppm in parts.	-

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Process Name /ชื่อขั้นตอน : **ควบคุมสารเคมีอันตราย ใน วัตถดิบ/ ผลิตภัณฑ์ / บรรจภัณฑ์**	Prod. Name/ชื่อสินค้า All	Special Characteristic/ คุณลักษณะพิเศษ -	Ref. เอกสารอ้างอิง ข้อกำหนดลูกค้า , RoHS, SVHC ,GADSL	Rev . 37	Page หน้า 35/130
Prod. No./หมายเลขสินค้า -	Customer/ชื่อลูกค้า -				

อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)

○ หมวกนิรภัย	○ ผ้าปิดจมูก	○ กระบังหน้ากันสะเก็ด	○ ปลอกยางสวมนิ้ว		
○ ถุงมือผ้า	○ ที่อุดหู	○ รองเท้านิรภัย	○ หน้ากากกรองสารเคมี	○ แว่นตากันสะเก็ด	○ เข็มขัดพยุงหลัง
○ ถุงมือยาง	○ ที่ครอบหู	○ ปลอกแขน	○ กระบังหน้ากรองแสง	○ เข็มขัดนิรภัย	○ เอี๊ยม

11	4-(1,1,3,3-Tetramethylbutyl) phenol, (4-tert-Octylphenol)	140-66-9	C	Less than 1000 ppm (or 0.1 wt%) of the parts	Less than 1000 ppm in packaging items
12	Bis(2-methoxyethyl) ether	111-96-6	C	Less than 1000 ppm (or 0.1 wt%) of the parts	-
13	1,2- Diethoxyethane	629-14-1	C	Less than 1000 pm in parts	
14	4,4'bis(dimethylamino)-4''-(methylamino) trityl alcohol	561-41-1	C	-	Less than 1000 ppm in packaging items
15	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I.Sovent Blue 4)	6786-83-0	C	-	Less than 1000 ppm in packaging items
16	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene] cyclohexa-2,5-dien-1-ylidene] dimethylammoniumchloride (C.I.Basic Blue 26)	2580-56-5	C	-	Less than 1000 ppm in packaging items

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YAMAGATA (THAILAND) Co., Ltd. A member of YAMAGATA Group — Work Instruction	Doc. No. WI-ES-13	Doc. Name : Hazardous Chemical Substances Standard Control	DAR. No. / เลขที่ DAR 099/25	Eff. Date/วันที่มีผลบังคับใช้ 19-Nov-2025
Process Name /ชื่อขั้นตอน : **ควบคุมสารเคมีอันตราย ใน วัตถดิบ/ ผลิตภัณฑ์ / บรรจภัณฑ์**	Prod. Name/ชื่อสินค้า All	Special Characteristic/ คุณลักษณะพิเศษ -	Ref. เอกสารอ้างอิง ข้อกำหนดลูกค้า , RoHS, SVHC ,GADSL	Rev . 37 / Page หน้า 36/130
Prod. No./หมายเลขสินค้า -	Customer/ชื่อลูกค้า -			

อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)

○ ถุงมือผ้า	○ ที่อุดหู	○ รองเท้านิรภัย	○ หน้ากากกรองสารเคมี	○ แว่นตากันสะเก็ด	○ เข็มขัดพยุงหลัง
○ ถุงมือยาง	○ ที่ครอบหู	○ ปลอกแขน	○ กระบังหน้ากรองแสง	○ เข็มขัดนิรภัย	○ เอี๊ยม
○ หมวกนิรภัย	○ ผ้าปิดจมูก	○ กระบังหน้ากันสะเก็ด	○ ปลอกยางสวมนิ้ว		

17	Trixylyl phosphate (TXP)	25155-23-1	C	Less than 1000 ppm of the parts	Inclusion of less than 1,000 ppm in packaging items
18	Bis(2-methoxyethyl)phthalate	117-82-8	C	Less than 1000 ppm of the product	Less than 1000 ppm of the packaging item
19	Chlorinated flame retardants (CFR) (Other than TCEP,TCPP or TDCPP)	-	C	Less than 1000 ppm in the plastic material	-
20	Lead chromate	7758-97-6	C	Less than 1000 ppm in the plastic material Less than 1000 ppm of the product	-
21	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	C	Less than 1000 ppm of the product	
22	Lead sulfochromate yellow (C.I.Pigment Yellow 34)	1344-37-2	C	Less than 1000 ppm of the product	
23	Pentazinc chromate octahydroxide	49663-84-5	C	Less than 1000 ppm of the product	
24	Potassium hydroxyoctaoxodizincate dichromate	11103-86-9	C	Less than 1000 ppm of the product	

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	Thunwarut	Thunwarut	Taweepoom	Taweepoom

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25	Strontium chromate	267-78-9	C	Less than 1000 ppm of the product	
26	4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-]-ylidene]dimethylammonium chloride	548-62-9	C	Less than 1000 ppm of the product	Less than 1000 ppm of the packaging item
27	(C.I.Basic Violet 3) Trilead diarsenate	548-62-9 3687-31-8	C C	Less than 1000 ppm of the product -	Less than 1000 ppm of the packaging item Less than 1000 ppm of the packaging item
28	Hexahydromethylphthalic anhydride	25550-51-0	C	Inclusion of less than 1,000 ppm in parts	Less than 1000 ppm in packaging items
28 29	Hexahydromethylphthalic anhydride Imidazolidine-2-thione, (2-imidazoline-2-thiol)	19438-60-9 48122-14-1 57110-29-9 96-45-7	C C	Inclusion of less than 1,000 ppm in parts Less than 1000 ppm in packaging items	Less than 1000 ppm in packaging items Inclusion of less than 1,000 ppm in packaging items
30	4-Aminoazobenzene	60-09-3	C	Less than 1000 ppm in packaging items	Inclusion of less than 1,000 ppm in packaging items

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31	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene 2,7disulphonate (Other name : C.I. Direct Black 38)	1937-37-7	C	Less than 1000 ppm in packaging items	
32	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)bis(4-aminonaphthalene-1-sulphonate (Other name : C.I. Direct Red 28)	573-58-0	C	Less than 1000 ppm in packaging items	
33	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalentyl bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, ehich include any of the individual isomers and/or combinations thereof]	26027-38-3	C	Less than 1000 ppm in packaging items	Inclusion of less than 1,000 ppm in packaging items
34	Disodium tetraborates	7311-27-5			
		20427-84-3			
		34166-38-6	C	Less than 1000 ppm in packaging items	Inclusion of less than 1,000 ppm in packaging items
		27942-27-4	C	Inclusion of less than 1,000 ppm	Inclusion of less than 1,000 ppm in in packaging items
		14409-72-4			
		1330-43-4			

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35	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	12179-04-3 1303-96-4 12267-73-1 15571-58-1	C	Inclusion of less than 1,000 ppm Less than 1000 ppm of the parts	Inclusion of less than 1,000 ppm in in packaging items
36	reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	C	Less than 1000 ppm of the parts	
37	4,4'-Isopropylidenediphenol (BPA)	80-05-7	C	Intentionally added or 0.1 wt% (1000 ppm) of article	Intentionally added or 0.1 wt%(1000 ppm) of article
38	Per/polyfluoroalkyl substances (PFAS)	-	C	Intentionally added	
39	Diisooctyl phthalate (DIOP)	27554-26-3	C	0.1 wt% (1000 ppm) in article	
40	Colecalciferol	67-97-0	C	0.1 mass%(1000ppm)of Article or Mixture	

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YAMAGATA (THAILAND) Co., Ltd. Work Instruction	Doc. No. WI-ES-13	Doc. Name : Hazardous Chemical Substances Standard Control		DAR. No. / เลขที่ DAR 099/25	Eff. Date/วันที่มีผลบังคับใช้ 19-Nov-2025	
Process Name /ชื่อขั้นตอน : **ควบคุมสารเคมีอันตราย ใน วัตถดิบ/ ผลิตภัณฑ์ / บรรจภัณฑ์**	Prod. Name/ชื่อสินค้า All	Special Characteristic/ คุณลักษณะพิเศษ	-	Ref. เอกสารอ้างอิง ข้อกำหนดลูกค้า , RoHS, SVHC ,GADSL	Rev . 37	Page หน้า 40/130
Prod. No./หมายเลขสินค้า -	Customer/ชื่อลูกค้า -					

อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)

ถุงมือผ้า	ที่อุดหู	หมวกนิรภัย	ผ้าปิดจมูก	กระบังหน้ากันสะเก็ด	ปลอกยางสวมนิ้ว
ถุงมือยาง	ที่ครอบหู	รองเท้านิรภัย	หน้ากากกรองสารเคมี	แว่นตากันสะเก็ด	เข็มขัดพยุงหลัง
		ปลอกแขน	กระบังหน้ากรองแสง	เข็มขัดนิรภัย	เอี๊ยม

ตารางที่ 2 สารเคมีต้องเฝ้าระวังเป็นอย่างยิ่งตามข้อกำหนดกฎหมาย (REACH : SVHC)

รายสาร (SVHC) ความคุมสูงสุดที่ยอมรับได้ตามน้ำหนักในวัสดุที่เป็นเนื้อเดียวกัน (0.1%) หรือ 1000 ppm.

อ้างอิงจาก : URL: https://echa.europa.eu/candidate-list-table

No.	Substance Name	Description	EC No.	CAS No.	Date of Inclusion
1	4,4'- Diaminodiphenylmethane (MDA)		202-974-4	101-77-9	28-Oct-2008
2	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)		201-329-4	81-15-2	28-Oct-2008
3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)		287-476-5	85535-84-8	28-Oct-2008
4	Anthracene		204-371-1	120-12-7	28-Oct-2008
5	Benzyl butyl phthalate (BBP)		201-622-7	85-68-7	28-Oct-2008
6	Bis (2-ethylhexyl)phthalate (DEHP)		204-211-0	117-81-7	28-Oct-2008
7	Bis(tributyltin) oxide (TBTO)		200-268-0	56-35-9	28-Oct-2008
8	Cobalt dichloride		231-589-4	7646-79-9	28-Oct-2008

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	Thunwarut	Thunwarut	Taweepoom	Taweepoom

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9	Diarsenic pentaoxide		215-116-9	1303-28-2	28-Oct-2008
10	Diarsenic trioxide		215-481-4	1327-53-3	28-Oct-2008
11	Dibutyl phthalate (DBP)		201-557-4	84-74-2	28-Oct-2008
12	Hexabromocyclododecane (HBCDD)	and all major diastereoisomers identified	-	-	28-Oct-2008
	1,2,5,6,9,10-hexabromocyclododecane		221-695-9	3194-55-6	28-Oct-2008
	Hexabromocyclododecane		247-148-4	25637-99-4	28-Oct-2008
	alpha-hexabromocyclododecane		-	134237-50-6	28-Oct-2008
	beta-hexabromocyclododecane		-	134237-51-7	28-Oct-2008
	gamma-hexabromocyclododecane		-	134237-52-8	28-Oct-2008
13	Lead hydrogen arsenate		232-064-2	7784-40-9	28-Oct-2008

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14	Sodium dichromate		234-190-3	10588-01-9, 7789-12-0	28-Oct-2008
15	Triethyl arsenate	-	427-700-2	15606-95-8	28-Oct-2008
16	2,4-dinitrotoluene		204-450-0	121-14-2	13-Jan-2010
17	Anthracene oil	-	292-602-7	90640-80-5	13-Jan-2010
18	Anthracene oil, anthracene paste	-	292-603-2	90640-81-6	13-Jan-2010
19	Anthracene oil, anthracene paste, anthracene fraction	-	295-275-9	91995-15-2	13-Jan-2010
20	Anthracene oil, anthracene paste, distn. lights	-	295-278-5	91995-17-4	13-Jan-2010
21	Anthracene oil, anthracene-low	-	292-604-8	90640-82-7	13-Jan-2010
22	Diisobutyl phthalate		201-553-2	84-69-5	13-Jan-2010
23	Lead chromate		231-846-0	7758-97-6	13-Jan-2010
24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	-	235-759-9	12656-85-8	13-Jan-2010

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25	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	-	215-693-7	1344-37-2	13-Jan-2010
26	Pitch, coal tar, high-temp.	-	266-028-2	65996-93-2	13-Jan-2010
27	Tris(2-chloroethyl) phosphate		204-118-5	115-96-8	13-Jan-2010
28	Acrylamide		201-173-7	79-06-1	30-Mar-2010
29	Ammonium dichromate		232-143-1	7789-09-5	18-Jun-2010
30	Boric acid	EC No. 233-139-2 and EC No. 234-343-4	-	-	18-Jun-2010
	Boric acid		233-139-2	10043-35-3	18-Jun-2010
	Boric acid, crude natural		234-343-4	11113-50-1	18-Jun-2010
31	Disodium tetraborate, anhydrous		215-540-4	12179-04-3, 1303-96-4, 1330-43-4	18-Jun-2010
32	Potassium chromate		232-140-5	7789-00-6	18-Jun-2010
33	Potassium dichromate		231-906-6	7778-50-9	18-Jun-2010
34	Sodium chromate		231-889-5	7775-11-3	18-Jun-2010

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35	Tetraboron disodium heptaoxide, hydrate		235-541-3	12267-73-1	18-Jun-2010
36	Trichloroethylene		201-167-4	79-01-6	18-Jun-2010
37	2-ethoxyethanol		203-804-1	110-80-5	15-Dec-2010
38	2-methoxyethanol		203-713-7	109-86-4	15-Dec-2010
39	Acids generated from chromium trioxide and their oligomers		-	-	15-Dec-2010
	Dichromic acid		236-881-5	13530-68-2	15-Dec-2010
	Oligomers of chromic acid and dichromic acid		-	-	15-Dec-2010
	Chromic acid		231-801-5	7738-94-5	15-Dec-2010
40	Chromium trioxide		215-607-8	1333-82-0	15-Dec-2010
41	Cobalt(II) carbonate		208-169-4	513-79-1	15-Dec-2010
42	Cobalt(II) diacetate		200-755-8	71-48-7	15-Dec-2010
43	Cobalt(II) dinitrate		233-402-1	10141-05-6	15-Dec-2010
44	Cobalt(II) sulphate		233-334-2	10124-43-3	15-Dec-2010
45	1,2,3-trichloropropane		202-486-1	96-18-4	20-Jun-2011

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46	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich		276-158-1	71888-89-6	20-Jun-2011
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters		271-084-6	68515-42-4	20-Jun-2011
48	1-Methyl-2-pyrrolidone (NMP)		212-828-1	872-50-4	20-Jun-2011
49	2-ethoxyethyl acetate		203-839-2	111-15-9	20-Jun-2011
50	Hydrazine		206-114-9	302-01-2, 7803-57-8	20-Jun-2011
51	Strontium chromate		232-142-6	7789-06-2	20-Jun-2011
52	1,2-dichloroethane		203-458-1	107-06-2	19-Dec-2011
53	2,2'-dichloro-4,4'-methylenedianiline		202-918-9	101-14-4	19-Dec-2011
54	2-Methoxyaniline, o-Anisidine		201-963-1	90-04-0	19-Dec-2011
55	4-(1,1,3,3-tetramethylbutyl)phenol		205-426-2	140-66-9	19-Dec-2011

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56	Aluminosilicate Refractory Ceramic Fibres	are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main	-	-	19-Dec-2011

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		components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm) c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight			
	Refractories, fibers, aluminosilicate		-	142844-00-6	19-Dec-2011
57	Arsenic acid		231-901-9	7778-39-4	19-Dec-2011

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58	Bis(2-methoxyethyl) ether		203-924-4	111-96-6	19-Dec-2011
59	Bis(2-methoxyethyl) phthalate		204-212-6	117-82-8	19-Dec-2011
60	Calcium arsenate		231-904-5	7778-44-1	19-Dec-2011
61	Dichromium tris(chromate)		246-356-2	24613-89-6	19-Dec-2011
62	Formaldehyde, oligomeric reaction products with aniline		500-036-1	25214-70-4	19-Dec-2011
63	Lead diazide, Lead azide		236-542-1	13424-46-9	19-Dec-2011
64	Lead dipicrate		229-335-2	6477-64-1	19-Dec-2011
65	Lead styphnate		239-290-0	15245-44-0	19-Dec-2011
66	N,N-dimethylacetamide		204-826-4	127-19-5	19-Dec-2011
67	Pentazinc chromate octahydroxide		256-418-0	49663-84-5	19-Dec-2011
68	Phenolphthalein		201-004-7	77-09-8	19-Dec-2011
69	Potassium hydroxyoctaoxodizincatedichromate		234-329-8	11103-86-9	19-Dec-2011
70	Trilead diarsenate		222-979-5	3687-31-8	19-Dec-2011

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71	Zirconia Aluminosilicate Refractory Ceramic Fibres	are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are	-	-	19-Dec-2011

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		the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm). c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+ BaO) content less or equal to 18% by weight			
	Refractories, fibers, aluminosilicate		-	142844-00-6	19-Dec-2011

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72	1, 2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)		203-794-9	110-71-4	18-Jun-2012
73	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)		203-977-3	112-49-2	18-Jun-2012
74	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)		219-514-3	2451-62-9	18-Jun-2012
75	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	-	423-400-0	59653-74-6	18-Jun-2012
76	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	209-218-2	561-41-1	18-Jun-2012
77	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)		202-027-5	90-94-8	18-Jun-2012
78	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	208-953-6	548-62-9	18-Jun-2012

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79	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	219-943-6	2580-56-5	18-Jun-2012
80	Diboron trioxide		215-125-8	1303-86-2	18-Jun-2012
81	Formamide		200-842-0	75-12-7	18-Jun-2012
82	Lead(II) bis(methanesulfonate)	-	401-750-5	17570-76-2	18-Jun-2012
83	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)		202-959-2	101-61-1	18-Jun-2012
84	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	229-851-8	6786-83-0	18-Jun-2012
85	1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear		284-032-2	84777-06-0	19-Dec-2012
86	1,2-diethoxyethane		211-076-1	629-14-1	19-Dec-2012

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87	1-bromopropane (n-propyl bromide)		203-445-0	106-94-5	19-Dec-2012
88	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	ZOLDINE MS-PLUS	421-150-7	143860-04-2	19-Dec-2012
89	4,4'-methylenedi-o-toluidine		212-658-8	838-88-0	19-Dec-2012
90	4,4'-oxydianiline		202-977-0	101-80-4	19-Dec-2012
91	4,4'-oxydianiline and its salts		-	-	19-Dec-2012
92	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	covering well-defined substances and UVCB substances, polymers and homologues	-	-	19-Dec-2012
	Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-		-	9036-19-5	19-Dec-2012
	Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether		-	9002-93-1	19-Dec-2012
	20-[4-(1,1,3,3-tetramethylbutyl)phenoxy]-3,6,9,12,15,18-hexaoxaicosan-1-ol		219-682-8	2497-59-8	19-Dec-2012

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	2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]ethanol		-	2315-67-5	19-Dec-2012
	2-[2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethanol		-	2315-61-9	19-Dec-2012
93	4-aminoazobenzene		200-453-6	60-09-3	19-Dec-2012
94	4-methyl-m-phenylenediamine (toluene-2,4-diamine)		202-453-1	95-80-7	19-Dec-2012
95	4-Nonylphenol, branched and linear	substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof	-	-	19-Dec-2012

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	p-(1-methyloctyl)phenol		241-427-4	17404-66-9	19-Dec-2012
	Phenol, 4-nonyl-, branched		284-325-5	84852-15-3	19-Dec-2012
	p-isononylphenol		247-770-6	26543-97-5	19-Dec-2012
	p-(1,1-dimethylheptyl)phenol		250-339-5	30784-30-6	19-Dec-2012
	4-(1-Ethyl-1,3-dimethylpentyl)phenol		-	186825-36-5	19-Dec-2012
	4-(1-Ethyl-1,4-dimethylpentyl)phenol		-	142731-63-3	19-Dec-2012
	p-nonylphenol		203-199-4	104-40-5	19-Dec-2012
	4-(1-ethyl-1-methylhexyl)phenol		257-907-1	52427-13-1	19-Dec-2012
	Isononylphenol		234-284-4	11066-49-2	19-Dec-2012
	Nonylphenol		246-672-0	25154-52-3	19-Dec-2012
	4-(1,1,5-Trimethylhexyl)phenol		-	521947-27-3	19-Dec-2012
	Phenol, nonyl-, branched		291-844-0	90481-04-2	19-Dec-2012
	4-(3-ethylheptan-2-yl)phenol		-	186825-39-8	19-Dec-2012
96	6-methoxy-m-toluidine (p-cresidine)		204-419-1	120-71-8	19-Dec-2012

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97	[Phthalato(2-)]dioxotrilead		273-688-5	69011-06-9	19-Dec-2012
98	Acetic acid, lead salt, basic		257-175-3	51404-69-4	19-Dec-2012
99	Biphenyl-4-ylamine		202-177-1	92-67-1	19-Dec-2012
100	Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)		214-604-9	1163-19-5	19-Dec-2012
101	Cyclohexane-1,2-dicarboxylic anhydride	all possible combinations of the cis- and trans- isomers	-	-	19-Dec-2012
	Cyclohexane-1,2-dicarboxylic anhydride		201-604-9	85-42-7	19-Dec-2012
	trans-cyclohexane-1,2-dicarboxylic anhydride		238-009-9	14166-21-3	19-Dec-2012
	cis-cyclohexane-1,2-dicarboxylic anhydride		236-086-3	13149-00-3	19-Dec-2012
102	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA)		204-650-8	123-77-3	19-Dec-2012
103	Dibutyltin dichloride (DBTC)		211-670-0	683-18-1	19-Dec-2012
104	Diethyl sulphate		200-589-6	64-67-5	19-Dec-2012

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105	Diisopentyl phthalate		210-088-4	605-50-5	19-Dec-2012
106	Dimethyl sulphate		201-058-1	77-78-1	19-Dec-2012
107	Dinoseb (6-sec-butyl-2,4-dinitrophenol)		201-861-7	88-85-7	19-Dec-2012
108	Dioxobis(stearato)trilead		235-702-8	12578-12-0	19-Dec-2012
109	Fatty acids, C16-18, lead salts		292-966-7	91031-62-8	19-Dec-2012
110	Furan		203-727-3	110-00-9	19-Dec-2012
111	Henicosafluoroundecanoic acid		218-165-4	2058-94-8	19-Dec-2012
112	Heptacosafluorotetradecanoic acid		206-803-4	376-06-7	19-Dec-2012
113	Hexahydromethylphthalic anhydride	including cis- and trans- stereo isomeric forms and all possible combinations of the isomers	-	-	19-Dec-2012
	Hexahydro-1-methylphthalic anhydride		256-356-4	48122-14-1	19-Dec-2012
	Hexahydromethylphthalic anhydride		247-094-1	25550-51-0	19-Dec-2012

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	Hexahydro-4-methylphthalic anhydride		243-072-0	19438-60-9	19-Dec-2012
	Hexahydro-3-methylphthalic anhydride		260-566-1	57110-29-9	19-Dec-2012
114	Lead bis(tetrafluoroborate)		237-486-0	13814-96-5	19-Dec-2012
115	Lead cyanamidate		244-073-9	20837-86-9	19-Dec-2012
116	Lead dinitrate		233-245-9	10099-74-8	19-Dec-2012
117	Lead monoxide (lead oxide)		215-267-0	1317-36-8	19-Dec-2012
118	Lead oxide sulfate		234-853-7	12036-76-9	19-Dec-2012
119	Lead titanium trioxide		235-038-9	12060-00-3	19-Dec-2012
120	Lead titanium zirconium oxide		235-727-4	12626-81-2	19-Dec-2012
121	Methoxyacetic acid		210-894-6	625-45-6	19-Dec-2012

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122	Methyloxirane (Propylene oxide)		200-879-2	75-56-9	19-Dec-2012
123	N,N-dimethylformamide		200-679-5	68-12-2	19-Dec-2012
124	N-methylacetamide		201-182-6	79-16-3	19-Dec-2012
125	n-pentyl-isopentyl phthalate		-	776297-69-9	19-Dec-2012
126	o-aminoazotoluene		202-591-2	97-56-3	19-Dec-2012
127	o-toluidine		202-429-0	95-53-4	19-Dec-2012
128	Orange lead (lead tetroxide)		215-235-6	1314-41-6	19-Dec-2012
129	Pentacosafluorotridecanoic acid		276-745-2	72629-94-8	19-Dec-2012
130	Pentalead tetraoxide sulphate		235-067-7	12065-90-6	19-Dec-2012
131	Pyrochlore, antimony lead yellow	-	232-382-1	8012-00-8	19-Dec-2012

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132	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD),the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008	272-271-5	68784-75-8	19-Dec-2012
133	Silicic acid, lead salt		234-363-3	11120-22-2	19-Dec-2012
134	Sulfurous acid, lead salt, dibasic		263-467-1	62229-08-7	19-Dec-2012
135	Tetraethyllead		201-075-4	78-00-2	19-Dec-2012

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136	Tetralead trioxide sulphate		235-380-9	12202-17-4	19-Dec-2012
137	Tricosafluorododecanoic acid		206-203-2	307-55-1	19-Dec-2012
138	Trilead bis(carbonate) dihydroxide		215-290-6	1319-46-6	19-Dec-2012
139	Trilead dioxide phosphonate		235-252-2	12141-20-7	19-Dec-2012
140	4-Nonylphenol, branched and linear, ethoxylated	substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the	-	-	20-Jun-2013

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	individual isomers and/or combinations thereof			
26-(4-Nonylphenoxy)-3,6,9,12,15,18,21,24- octaoxahexacosan -1-ol		-	14409-72-4	20-Jun-2013
Poly (oxy-1,2-ethanediyl), alpha -(nonylphenyl)-omega-hydroxy-, branched		-	68412-54-4	20-Jun-2013
Nonylphenol, branched, ethoxylated	1 - 2.5 moles ethoxylated	500-209-1	68412-54-4	20-Jun-2013
4-Nonylphenol, ethoxylated	1 - 2.5 moles ethoxylated	500-045-0	26027-38-3	20-Jun-2013
Nonylphenol, ethoxylated		500-024-6	9016-45-9	20-Jun-2013
2-[2-[2-[2-(4-nonylphenoxy)ethoxy]ethoxy]ethoxy]ethanol		230-770-5	7311-27-5	20-Jun-2013
Poly(oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy-, branched		-	68412-54-4	20-Jun-2013
Nonylphenol, ethoxylated (10-EO)		-	9016-45-9	20-Jun-2013
Nonylphenol, ethoxylated (8-EO)		-	9016-45-9	20-Jun-2013
Nonylphenol, ethoxylated (6,5-EO)		-	9016-45-9	20-Jun-2013

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20-(4-nonylphenoxy)-3,6,9,12,15,18-hexaoxaicosan-1-ol		248-743-1	27942-27-4	20-Jun-2013
2-[2-(4-nonylphenoxy)ethoxy]ethanol		243-816-4	20427-84-3	20-Jun-2013
Nonylphenol, ethoxylated (15-EO)		-	9016-45-9	20-Jun-2013
Nonylphenol, ethoxylated (EO = 10)		-	-	20-Jun-2013
4-Nonylphenol, branched, ethoxylated	1 - 2.5 moles ethoxylated	500-315-8	127087-87-0	20-Jun-2013
44-(nonylphenoxy)-3,6,9,12,15,18,21,24,27,30,33,36,39,42-tetradecaoxatetratetracontanol		260-678-0	57321-10-5	20-Jun-2013
14-(nonylphenoxy)-3,6,9,12-tetraoxatetradecan-1-ol		247-555-7	26264-02-8	20-Jun-2013
26-(nonylphenoxy)-3,6,9,12,15,18,21,24-octaoxahexacosan-1-ol		247-816-5	26571-11-9	20-Jun-2013
2-[2-(nonylphenoxy)ethoxy]ethanol		248-291-5	27176-93-8	20-Jun-2013
20-(nonylphenoxy)-3,6,9,12,15,18-hexaoxaicosan-1-ol		248-292-0	27177-03-3	20-Jun-2013
23-(nonylphenoxy)-3,6,9,12,15,18,21-heptaoxatricosan-1-ol		248-293-6	27177-05-5	20-Jun-2013
29-(nonylphenoxy)-3,6,9,12,15,18,21,24,27-nonaoxanonacosanol		248-294-1	27177-08-8	20-Jun-2013
17-(4-nonylphenoxy)-3,6,9,12,15-pentaoxaheptadecan-1-ol		-	34166-38-6	20-Jun-2013

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Isononylphenol, ethoxylated		-	37205-87-1	20-Jun-2013
2-(4-nonylphenoxy)ethanol		-	104-35-8	20-Jun-2013
4-t-Nonylphenol-diethoxylate		-	156609-10-8	20-Jun-2013
3,6,9,12-Tetraoxatetradecan-1-ol, 14-(4-nonylphenoxy)-		-	20636-48-0	20-Jun-2013
Nonylphenol, ethoxylated (EO = 4)		-	-	20-Jun-2013
Nonylphenol, ethoxylated (polymer)		-	-	20-Jun-2013
2-{2-[4-(3,6-dimethylheptan-3-yl)phenoxy]ethoxy}ethanol		-	1119449-38-5	20-Jun-2013
2-[4-(3,6-dimethylheptan-3-yl)phenoxy]ethanol		-	1119449-37-4	20-Jun-2013
Nonylphenolpolyglycolether		-	-	20-Jun-2013
4-Nonylphenol, branched, ethoxylated		-	127087-87-0	20-Jun-2013
Poly(oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy-		-	9016-45-9	20-Jun-2013
3,6,9,12-Tetraoxatetradecan-1-ol, 14-(4-nonylphenoxy)-, branched		293-926-1	91648-64-5	20-Jun-2013
20-(isononylphenoxy)-3,6,9,12,15,18-hexaoxaicosan-1-ol		265-785-6	65455-69-8	20-Jun-2013
2-(isononylphenoxy)ethanol		284-987-5	85005-55-6	20-Jun-2013

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	26-(nonylphenoxy)-3,6,9,12,15,18,21,24-octaoxahexacosan-1-ol		255-695-5	42173-90-0	20-Jun-2013
	2-(nonylphenoxy)ethanol		248-762-5	27986-36-3	20-Jun-2013
	3,6,9,12,15-Pentaoxaheptadecan-1-ol, 17-(nonylphenoxy)-		-	27177-01-1	20-Jun-2013
	3,6,9,12,15,18,21,24,27-Nonaoxanonacosan-1-ol, 29-(isononylphenoxy)-		-	65455-72-3	20-Jun-2013
141	Ammonium pentadecafluorooctanoate (APFO)		223-320-4	3825-26-1	20-Jun-2013
142	Cadmium		231-152-8	7440-43-9	20-Jun-2013
143	Cadmium oxide		215-146-2	1306-19-0	20-Jun-2013
144	Dipentyl phthalate (DPP)		205-017-9	131-18-0	20-Jun-2013
145	Pentadecafluorooctanoic acid (PFOA)		206-397-9	335-67-1	20-Jun-2013
146	Cadmium sulphide		215-147-8	1306-23-6	16-Dec-2013
147	Dihexyl phthalate		201-559-5	84-75-3	16-Dec-2013
148	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)		209-358-4	573-58-0	16-Dec-2013

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149	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)		217-710-3	1937-37-7	16-Dec-2013
150	Imidazolidine-2-thione (2-imidazoline-2-thiol)		202-506-9	96-45-7	16-Dec-2013
151	Lead di(acetate)		206-104-4	301-04-2	16-Dec-2013
152	Trixylyl phosphate		246-677-8	25155-23-1	16-Dec-2013
153	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear		271-093-5	68515-50-4	16-Jun-2014
154	Cadmium chloride		233-296-7	10108-64-2	16-Jun-2014
155	Sodium peroxometaborate		231-556-4	7632-04-4	16-Jun-2014
	Sodium perborate, perboric acid, sodium salt		-	-	16-Jun-2014
	Perboric acid, sodium salt, tetrahydrate		-	37244-98-7	16-Jun-2014
	Perboric acid (HBO(O2)), sodium salt, tetrahydrate		-	10486-00-7	16-Jun-2014
	Sodium perborate monohydrate		-	10332-33-9	16-Jun-2014
	Borate(2-), tetrahydroxybis[**μ**-(peroxy-**K**O1:**K**O2)]di-, sodium,		-	125022-34-6	16-Jun-2014

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	hydrate (1:2:6)				
	Borate(2-), tetrahydroxybis[**μ**-(peroxy-**K**O1:**K**O2)]di-, sodium (1:2)		-	90568-23-3	16-Jun-2014
	Perboric acid, sodium salt		234-390-0	11138-47-9	16-Jun-2014
	Perboric acid (H3BO2(O2)), monosodium salt, trihydrate		-	13517-20-9	16-Jun-2014
	Sodium perborate		239-172-9	15120-21-5	16-Jun-2014
156	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)		247-384-8	25973-55-1	17-Dec-2014
157	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)		223-346-6	3846-71-7	17-Dec-2014
158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)		239-622-4	15571-58-1	17-Dec-2014
159	Cadmium fluoride		232-222-0	7790-79-6	17-Dec-2014
160	Cadmium sulphate		233-331-6	10124-36-4, 31119-53-6	17-Dec-2014
161	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-		-	-	17-Dec-2014

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	[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)				
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters	with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	-	-	15-Jun-2015
	1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters		272-013-1	68648-93-1	15-Jun-2015
	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters		271-094-0	68515-51-5	15-Jun-2015
163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2]	covering any of the individual stereoisomers of [1] and [2] or any combination thereof	-	-	15-Jun-2015

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Reaction mass of 5-[(2R)-butan-2-yl]-2-[(1R,2R)-2,4-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane and 5-[(2R)-butan-2-yl]-2-[(1R,6R)-4,6-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane and 5-[(2S)-butan-2-yl]-2-[(1R,2R)-2,4-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane and 5-[(2S)-butan-2-yl]-2-[(1S,2R)-2,4-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane and 5-[(2S)-butan-2-yl]-2-[(1S,6R)-4,6-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane		-	-	15-Jun-2015
1,3-Dioxane, 2-[(1S,2S)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-		-	676367-06-9	15-Jun-2015
5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane		-	-	15-Jun-2015
Reaction mass of 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane and 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane		413-720-9	-	15-Jun-2015

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1,3-Dioxane, 2-(2,4-dimethyl-3-cyclohexen-1-yl)-5-methyl-5-(1-methylpropyl)-		-	117933-89-8	15-Jun-2015
1,3-Dioxane, 2-(2,4-dimethyl-3-cyclohexen-1-yl)-5-methyl-5-(1-methylpropyl)-		-	186309-28-4	15-Jun-2015
1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-		-	676367-05-8	15-Jun-2015
1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-rel-		-	343934-04-3	15-Jun-2015
1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-		-	676367-09-2	15-Jun-2015
1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-rel-		-	343934-05-4	15-Jun-2015
1,3-Dioxane, 2-[(1R,2S)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-		-	676367-04-7	15-Jun-2015
1,3-Dioxane, 2-[(1R,2S)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-		-	676367-08-1	15-Jun-2015

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	5-(1-methylpropyl)-, trans-				
	1,3-Dioxane, 2-[(1S,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-		-	676367-03-6	15-Jun-2015
	1,3-Dioxane, 2-[(1S,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-		-	676367-07-0	15-Jun-2015
	1,3-Dioxane, 2-[(1S,2S)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-		-	676367-02-5	15-Jun-2015
	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane		-	-	15-Jun-2015
164	1,3-propanesultone		214-317-9	1120-71-4	17-Dec-2015
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)		223-383-8	3864-99-1	17-Dec-2015
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)		253-037-1	36437-37-3	17-Dec-2015
167	Nitrobenzene		202-716-0	98-95-3	17-Dec-2015
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts		-	-	17-Dec-2015

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	Perfluorononan-1-oic-acid		206-801-3	375-95-1	17-Dec-2015
	Sodium salts of perfluorononan-1-oic-acid		-	21049-39-8	17-Dec-2015
	Ammonium salts of perfluorononan-1-oic-acid		-	4149-60-4	17-Dec-2015
169	Benzo[def]chrysene (Benzo[a]pyrene)		200-028-5	50-32-8	20-Jun-2016
170	4,4'-isopropylidenediphenol	Bisphenol A; BPA	201-245-8	80-05-7	12-Jan-2017
171	4-heptylphenol, branched and linear	substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the	-	-	12-Jan-2017

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	individual isomers or a combination thereof			
4-heptylphenol		217-862-0	1987-50-4	12-Jan-2017
Phenol, heptyl derivs.		276-743-1	72624-02-3	12-Jan-2017
4-(3-ethylpentan-3-yl)phenol		-	37872-24-5	12-Jan-2017
4-(2-methylhexan-2-yl)phenol		-	30784-31-7	12-Jan-2017
4-(3,3-dimethylpentan-2-yl)phenol		-	911371-06-7	12-Jan-2017
4-(3-methylhexan-2-yl)phenol		-	854904-93-1	12-Jan-2017

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4-(4,4-dimethylpentan-2-yl)phenol		-	911371-07-8	12-Jan-2017
4-(4-methylhexan-2-yl)phenol		-	71945-81-8	12-Jan-2017
4-(5-methylhexan-2-yl)phenol		-	857629-71-1	12-Jan-2017
4-(2,2-dimethylpentan-3-yl)phenol		-	861010-65-3	12-Jan-2017
Phenol, 4-(1-ethyl-1,2-dimethylpropyl)-		-	30784-27-1	12-Jan-2017
4-(heptan-3-yl)phenol		-	6465-74-3	12-Jan-2017
4-(heptan-2-yl)phenol		-	6863-24-7	12-Jan-2017
4-(heptan-4-yl)phenol		-	6465-71-0	12-Jan-2017
4-(3-ethylpentyl)phenol		-	911370-98-4	12-Jan-2017
4-(3-methylhexyl)phenol		-	102570-52-5	12-Jan-2017
4-(4-methylhexyl)phenol		-	1139800-98-8	12-Jan-2017
4-(5-methylhexyl)phenol		-	100532-36-3	12-Jan-2017
4-(2,4-dimethylpentan-3-yl)phenol		-	1824346-00-0	12-Jan-2017
Phenol, 4-tert-heptyl-		-	288864-02-8	12-Jan-2017

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	4-(2,3-dimethylpentan-2-yl)phenol		-	861011-60-1	12-Jan-2017
	4-(3-methylhexan-3-yl)phenol		-	30784-32-8	12-Jan-2017
	4-(2,4-dimethylpentan-2-yl)phenol		-	33104-11-9	12-Jan-2017
	4-(2,3,3-trimethylbutan-2-yl)phenol		-	72861-06-4	12-Jan-2017
	4-(5-methylhexan-3-yl)phenol		-	854904-92-0	12-Jan-2017
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts		-	-	12-Jan-2017
	Nonadecafluorodecanoic acid		206-400-3	335-76-2	12-Jan-2017
	sodium nonadecafluorodecanoate		-	3830-45-3	12-Jan-2017
	Ammonium nonadecafluorodecanoate		221-470-5	3108-42-7	12-Jan-2017
173	p-(1,1-dimethylpropyl)phenol		201-280-9	80-46-6	12-Jan-2017
174	Perfluorohexane-1-sulphonic acid and its salts	PFHxS	-	-	07-Jul-2017
	perfluorohexane-1-sulphonic acid		206-587-1	355-46-4	07-Jul-2017
	ammonium perfluorohexane-1-sulphonate		269-511-6	68259-08-5	07-Jul-2017

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tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1)		274-462-9	70225-16-0	07-Jul-2017
potassium perfluorohexane-1-sulphonate		223-393-2	3871-99-6	07-Jul-2017
Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	1310480-24-0	07-Jul-2017
Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	1310480-27-3	07-Jul-2017
Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-		-	1310480-28-4	07-Jul-2017

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hexanesulfonate (1:1)				
Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)		-	1329995-45-0	07-Jul-2017
Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)		-	1329995-69-8	07-Jul-2017
Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	144116-10-9	07-Jul-2017
Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl] 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate		-	1462414-59-0	07-Jul-2017
Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	153443-35-7	07-Jul-2017
Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)		-	189274-31-5	07-Jul-2017

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1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd.with 2-methyl-2-propanamine (1:1)		-	202189-84-2	07-Jul-2017
Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	213740-81-9	07-Jul-2017
Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	341548-85-4	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1)		-	350836-93-0	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1)		-	41184-65-0	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1)		-	41242-12-0	07-Jul-2017
Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)		-	421555-73-9	07-Jul-2017
Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with		-	421555-74-0	07-Jul-2017

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1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic				
Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	425670-70-8	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, lithium salt (1:1)		-	55120-77-9	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, zinc salt		-	70136-72-0	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N,N-diethylethanamine (1:1)		-	72033-41-1	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, sodium salt		-	82382-12-5	07-Jul-2017
Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (9CI)		-	866621-50-3	07-Jul-2017
Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-		-	910606-39-2	07-Jul-2017

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tridecafluoro-1-hexanesulfonate (1:1)				
Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	911027-68-4	07-Jul-2017
Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate		-	911027-69-5	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1)		-	92011-17-1	07-Jul-2017
Dibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	928049-42-7	07-Jul-2017
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-,		-	1187817-57-7	07-Jul-2017

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	compd. With pyrrolidine (1:1)				
	N,N,N-triethylethanaminium tridecafluorohexane-1-sulfonate		-	108427-55-0	07-Jul-2017
	N,N,N-tributylbutan-1-aminium tridecafluorohexane-1-sulfonate		-	108427-54-9	07-Jul-2017
	Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		-	1000597-52-3	07-Jul-2017
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9CI)		-	341035-71-0	07-Jul-2017
175	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene (“Dechlorane Plus”™)	covering any of its individual anti- and syn-isomers or any combination thereof	-	-	15-Jan-2018
	(1S,2S,5R,6R,9S,10S,13R,14R)-1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1^{6,9}.0^{2,13}.0^{5,10}]octadeca-7,15-diene		-	135821-03-3	15-Jan-2018
	1,6,7,8,9,14,15,16,17,17,18,18-		236-948-9	13560-89-9	15-Jan-2018

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	dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene				
	(1S,2S,5S,6S,9R,10R,13R,14R)-1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1^{6,9}.0^{2,13}.0^{5,10}]octadeca-7,15-diene		-	135821-74-8	15-Jan-2018
	rel-(1R,4S,4aS,6aR,7R,10S,10aS,12aR)-1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4:7,10-dimethanodibenzo[a,e]cyclooctene		-	-	15-Jan-2018
	rel-(1R,4S,4aS,6aS,7S,10R,10aR,12aR)-1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4:7,10-dimethanodibenzo[a,e]cyclooctene		-	-	15-Jan-2018
176	Benz[a]anthracene		200-280-6	56-55-3	15-Jan-2018
177	Cadmium carbonate		208-168-9	513-78-0	15-Jan-2018

*In case of find any problem such as , out of spec. quality, M/C break down, please inform leader and supervisor immediately./ ในกรณีการปฏิบัติงานมีปัญหาเกิดขึ้น เช่น คุณภาพไม่ได้มาตรฐาน เครื่องจักรเสีย ให้รายงานหัวหน้าทันที	MR ผู้แทนฝ่ายบริหาร	Approved by ผู้อนุมัติ	Checked by ผู้ตรวจสอบ	Prepared by ผู้จัดทำ
	Thunwarut	Thunwarut	Taweepoom	Taweepoom

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178	Cadmium hydroxide		244-168-5	21041-95-2	15-Jan-2018
179	Cadmium nitrate		233-710-6	10325-94-7	15-Jan-2018
180	Chrysene		205-923-4	218-01-9	15-Jan-2018
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)	-	-	15-Jan-2018
	Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.		-	1471311-26-8	15-Jan-2018
	Formaldehyde, reaction products with branched and linear heptylphenol, carbon disulfide and hydrazine		300-298-5	93925-00-9	15-Jan-2018
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	trimellitic anhydride; TMA	209-008-0	552-30-7	27-Jun-2018
183	Benzo[ghi]perylene		205-883-8	191-24-2	27-Jun-2018
184	Decamethylcyclopentasiloxane	D5	208-764-9	541-02-6	27-Jun-2018
185	Dicyclohexyl phthalate	DCHP	201-545-9	84-61-7	27-Jun-2018

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186	Disodium octaborate		234-541-0	12008-41-2	27-Jun-2018
187	Dodecamethylcyclohexasiloxane	D6	208-762-8	540-97-6	27-Jun-2018
188	Ethylenediamine	EDA	203-468-6	107-15-3	27-Jun-2018
189	Lead		231-100-4	7439-92-1	27-Jun-2018
190	Octamethylcyclotetrasiloxane	D4	209-136-7	556-67-2	27-Jun-2018
191	Terphenyl, hydrogenated		262-967-7	61788-32-7	27-Jun-2018
192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2	3-benzylidene camphor; 3-	239-139-9	15087-24-8	15-Jan-2019
193	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	AP-5	401-720-1	6807-17-6	15-Jan-2019
194	Benzo[k]fluoranthene		205-916-6	207-08-9	15-Jan-2019
195	Fluoranthene		205-912-4	206-44-0	15-Jan-2019
196	Phenanthrene		201-581-5	85-01-8	15-Jan-2019
197	Pyrene		204-927-3	129-00-0	15-Jan-2019
198	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides	covering any of their individual isomers and	-	-	16-Jul-2019

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		combinations thereof			
	potassium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionate		266-578-3	67118-55-2	16-Jul-2019
	ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate		-	62037-80-3	16-Jul-2019
	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionyl fluoride		218-173-8	2062-98-8	16-Jul-2019
	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid		236-236-8	13252-13-6	16-Jul-2019
	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (+)-		-	75579-39-4	16-Jul-2019
	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (-)-		-	75579-40-7	16-Jul-2019
199	2-methoxyethyl acetate		203-772-9	110-49-6	16-Jul-2019
200	4-tert-butylphenol		202-679-0	98-54-4	16-Jul-2019
201	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-		-	-	16-Jul-2019
	Phenol, 4-nonyl-, phosphite (3:1)		-	3050-88-2	16-Jul-2019
	tris(4-nonylphenyl, branched) phosphite		-	-	16-Jul-2019
	tris(nonylphenyl) phosphite		247-759-6	26523-78-4	16-Jul-2019

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	Phenol, p-sec-nonyl-, phosphite		-	106599-06-8	16-Jul-2019
	Phenol, p-isononyl-, phosphite (3:1)		-	31631-13-7	16-Jul-2019
202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	CG 25-369; IRGACURE 369; TK 11-319	404-360-3	119313-12-1	16-Jan-2020
203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	ACETOCURE 97; GENOCURE*PMP; IGM 4817; IRGACURE 907; SPEEDCURE 97	400-600-6	71868-10-5	16-Jan-2020
204	Diisohexyl phthalate		276-090-2	71850-09-4	16-Jan-2020
205	Perfluorobutane sulfonic acid (PFBS) and its salts		-	-	16-Jan-2020
	Potassium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate		249-616-3	29420-49-3	16-Jan-2020
	1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonic acid		206-793-1	375-73-5	16-Jan-2020
	bis(4-t-butylphenyl)iodonium perfluorobutanesulfonate		432-660-4	194999-85-4	16-Jan-2020
	tetrabutyl-phosphonium nonafluoro-butane-1-sulfonate		444-440-5	220689-12-3	16-Jan-2020

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	dimethyl(phenyl)sulfanium perfluorobutanesulfonate		452-310-4	220133-51-7	16-Jan-2020
	Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate		269-513-7	68259-10-9	16-Jan-2020
	Triphenylsulfanium perfluorobutane sulfonate		478-340-8	144317-44-2	16-Jan-2020
	N,N,N-triethylethanaminium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulfonate		-	25628-08-4	16-Jan-2020
	magnesium perfluorobutanesulfonate		-	507453-86-3	16-Jan-2020
	lithium perfluorobutanesulfonate		-	131651-65-5	16-Jan-2020
	morpholinium perfluorobutanesulfonate		-	503155-89-3	16-Jan-2020
	1-(4-butoxy-1-naphthalenyl)tetrahydrothiophenium 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate		468-770-4	-	16-Jan-2020
206	1-vinylimidazole		214-012-0	1072-63-5	25-Jun-2020
207	2-methylimidazole		211-765-7	693-98-1	25-Jun-2020
208	Butyl 4-hydroxybenzoate		202-318-7	94-26-8	25-Jun-2020
209	Dibutylbis(pentane-2,4-dionato-O,O')tin		245-152-0	22673-19-4	25-Jun-2020

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210	Bis(2-(2-methoxyethoxy)ethyl)ether		205-594-7	143-24-8	19-Jan-2021
211	Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety		-	-	19-Jan-2021
	Stannane, dioctyl-, bis(coco acyloxy) derivs.		293-901-5	91648-39-4	19-Jan-2021
	dioctyltin dilaurate; stannane, dioctyl-, bis(coco acyloxy) derivs.		-	-	19-Jan-2021
	Dioctyltin dilaurate		222-883-3	3648-18-8	19-Jan-2021
212	1,4-dioxane		204-661-8	123-91-1	08-Jul-2021
213	2,2-bis(bromomethyl)propane-1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)		-	-	08-Jul-2021
	2,2-dimethylpropan-1-ol, tribromo derivative (TBNPA)		253-057-0	36483-57-5	08-Jul-2021
	2,3-dibromo-1-propanol (2,3-DBPA)		202-480-9	96-13-9	08-Jul-2021
	2,2-bis(bromomethyl)propane-1,3-diol (BMP)		221-967-7	3296-90-0	08-Jul-2021

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	3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA)		-	1522-92-5	08-Jul-2021
214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers		-	-	08-Jul-2021
	(2R)-3-(4-tert-butylphenyl)-2-methylpropanal		-	75166-31-3	08-Jul-2021
	2-(4-tert-butylbenzyl)propionaldehyde		201-289-8	80-54-6	08-Jul-2021
	(2S)-3-(4-tert-butylphenyl)-2-methylpropanal		-	75166-30-2	08-Jul-2021
215	4,4'-(1-methylpropylidene)bisphenol		201-025-1	77-40-7	08-Jul-2021
216	glutaral		203-856-5	111-30-8	08-Jul-2021
217	Medium-chain chlorinated paraffins (MCCP)	UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17	-	-	08-Jul-2021
	Alkanes, C14-17, chloro		287-477-0	85535-85-9	08-Jul-2021

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	di-, tri- and tetrachlorotetradecane		-	-	08-Jul-2021
	Tetradecane, chloro derivs.		-	198840-65-2	08-Jul-2021
	Alkanes, C14-16, chloro		-	1372804-76-6	08-Jul-2021
218	orthoboric acid, sodium salt		-	-	08-Jul-2021
	Boric acid, sodium salt		215-604-1	1333-73-9	08-Jul-2021
	Orthoboric acid, sodium salt		237-560-2	13840-56-7	08-Jul-2021
	boric acid (H3BO3), sodium salt, hydrate		-	25747-83-5	08-Jul-2021
	boric acid (H3BO3), sodium salt (1:1)		-	14890-53-0	08-Jul-2021
	Boric acid (H3BO3), disodium salt		-	22454-04-2	08-Jul-2021
	Trisodium orthoborate		238-253-6	14312-40-4	08-Jul-2021
219	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any		-	-	08-Jul-2021

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	individual isomers and/ or combinations thereof (PDDP)				
	Phenol, dodecyl-, branched		310-154-3	121158-58-5	08-Jul-2021
	Phenol, (tetrapropenyl) derivatives		-	74499-35-7	08-Jul-2021
	Phenol, 4-isododecyl-		-	27147-75-7	08-Jul-2021
	4-isododecylphenol		-	27459-10-5	08-Jul-2021
	Phenol, tetrapropylene-		-	57427-55-1	08-Jul-2021
	Phenol, 4-dodecyl, branched		-	210555-94-5	08-Jul-2021
220	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)		-	-	17-Jan-2022
	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one		253-242-6	36861-47-9	17-Jan-2022
	(3E)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one		-	1782069-81-1	17-Jan-2022

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	(1R,3E,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one		-	95342-41-9	17-Jan-2022
	(1S,3E,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one		-	852541-30-1	17-Jan-2022
	(1R,3Z,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one		-	852541-21-0	17-Jan-2022
	(1R,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one		-	741687-98-9	17-Jan-2022
	(1S,3Z,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one		-	852541-25-4	17-Jan-2022
221	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol		204-327-1	119-47-1	17-Jan-2022
222	S-(tricyclo(5.2.1.0'2,6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	X4261	401-850-9	255881-94-8	17-Jan-2022
223	tris(2-methoxyethoxy)vinylsilane		213-934-0	1067-53-4	17-Jan-2022

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224	N-(hydroxymethyl)acrylamide		213-103-2	924-42-5	10-Jun-2022
225	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]		253-692-3	37853-59-1	17-Jan-2023
226	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol		201-236-9	79-94-7	17-Jan-2023
227	4,4'-sulphonyldiphenol		201-250-5	80-09-1	17-Jan-2023
228	Barium diboron tetraoxide		237-222-4	13701-59-2	17-Jan-2023
229	bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof		-	-	17-Jan-2023
	Bis(2-ethylhexyl) tetrabromophthalate		247-426-5	26040-51-7	17-Jan-2023
230	Isobutyl 4-hydroxybenzoate		224-208-8	4247-02-3	17-Jan-2023
231	Melamine		203-615-4	108-78-1	17-Jan-2023
232	Perfluoroheptanoic acid and its salts		-	-	17-Jan-2023
	Ammonium perfluoroheptanoate		228-098-2	6130-43-4	17-Jan-2023
	potassium perfluoroheptanoate		-	21049-36-5	17-Jan-2023

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	Perfluoroheptanoic acid		206-798-9	375-85-9	17-Jan-2023
	Sodium perfluoroheptanoate		243-518-4	20109-59-5	17-Jan-2023
233	reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine		473-390-7	-	17-Jan-2023
234	bis(4-chlorophenyl) sulphone		201-247-9	80-07-9	14-Jun-2023
235	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		278-355-8	75980-60-8	14-Jun-2023
236	2,4,6-tri-tert-butylphenol		211-989-5	732-26-3	23-Jan-2024
237	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)		221-573-5	3147-75-9	23-Jan-2024
238	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one		438-340-0	119344-86-4	23-Jan-2024
239	Bumetrizole (UV-326)		223-445-4	3896-11-5	23-Jan-2024
240	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol		700-960-7	-	23-Jan-2024
	Phenol, methylstyrenated		270-966-8	68512-30-1	23-Jan-2024
241	Bis(α,α-dimethylbenzyl) peroxide		201-279-3	80-43-3	27-Jun-24

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242	Triphenyl phosphate		204-112-2	115-86-6	07-Nov-2024
243	6-[(C10-C13)-alkyl-(branched, unsaturated)-2,5-dioxopyrrolidin-1-yl]hexanoic acid		701-118-1	2156592-54-8	21-Jan-2025
244	O,O,O-triphenyl phosphorothioate		209-909-9	597-82-0	21-Jan-2025
245	Octamethyltrisiloxane		203-497-4	107-51-7	21-Jan-2025
246	Perfluamine		206-420-2	338-83-0	21-Jan-2025
247	reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives		421-820-9	192268-65-8	21-Jan-2025
248	1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxy]trisiloxane		241-867-7	17928-28-8	25-Jun-2025
249	decamethyltetrasiloxane		205-491-7	141-62-8	25-Jun-2025
250	tetra(sodium/potassium) 7-[(E)-{2-acetamido-4-[(E)-(4-{[4-chloro-6-({2-[(4-fluoro-6-{[4-(vinylsulfonyl)phenyl]amino}-1,3,5-triazine-2-yl)amino]propyl}amino)-1,3,5-triazine-2-yl]amino}-5-sulfonato-1-naphthyl)diazenyl]-5-methoxyphenyl}diazenyl]-1,3,6-naphthalenetrisulfonate (Reactive Brown 51)	substance having a complex composition with <80% of the above constituents and other reaction side products	466-490-7	-	25-Jun-2025
251	1,1'-(ethane-1,2-diyl)bis[pentabromobenzene] (DBDPE)		284-366-9	84852-53-9	05-Nov-2025

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ตารางที่ 3 สารเคมีที่ควบคุมในกลุ่มยานยนต์

ประกอบด้วยสารเคมี 2 กลุ่ม คือ สารเคมีในกลุ่ม P (Prohibited) สารเคมีที่เป็นอันตราย และสารเคมีในกลุ่ม D (Declarable) สารเคมีที่ต้องทำการเปิดเผยข้อมูลหากค่าเกินกว่าที่กำหนด

อ้างอิงจาก URL: https://www.gadsl.org

NO	Substance	CAS RN	Classification	Reporting threshold (0.1% unless otherwise stated)
1	Acetaldehyde	75-07-0	D	
2	Acetamide, N-methyl-	79-16-3	D	
3	Acetonitrile	75-05-8	D	
4	Acrylamide	79-06-1	D	
5	Acrylonitrile	107-13-1	D	
6	Alkyl (C7-C9), 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates, mixture of branched and linear	127519-17-9	D	

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7	Alkyl Phenol derivatives, selected		D/P	0.3% per CLP regulation 1712/2008 (EC) table 3.7.2 These substance use are prohibitted for additives of mixture sold independently (for example; anti-oxide additive of lubricant) Reporting threshold is 0.1%
8	Amines, coco alkyl	61788-46-3	D	
9	Amines, which can form carcinogenic Nitrosamines, selected		D	
10	4-Aminobiphenyl and its salts, all members		P	0.01%
11	Ammonium Nitrate (AN)	6484-52-2	D	
12	Ammonium perchlorate	7790-98-9	D	
13	Aniline and its salts, all members		D	
14	Anthracene oil	90640-80-5	D/P	
15	9,10-Anthracenedione, 1-[(5,7-dichloro-1,9-dihydro-2-methyl-9-oxopyrazolo[5,1-b]quinazolin-3-yl)azo]- (Pigment Red 251)	74336-60-0	D	0.1% Any intentionally added content must be reported; no testing required.
16	Antimonytrioxide (Diantimonytrioxide)	1309-64-4	D	
17	Aromatic amines, selected		D/P	

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18	Arsenic and its compounds, all members		D/P	0.01% (unless present in metals & alloys, then the declaration limit is 0.05%).
19	Asbestos fibers, all members		P	Any intentionally added content is prohibited
20	Asbestos minerals, all members		D/P	Any intentionally added content must be reported or is prohibited
21	Azodyes that can form carcinogenic amines, selected		D/P	
22	Barium compounds (organic or water soluble), selected		D	0.01
23	Benzene		P	0.1% for physical solid state parts Shall not be placed on the market textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing. （Concentration limit by weight 0.0005%）
24	Benzene, 1-(1,1-dimethylethyl)-3,5-dimethyl-2,4,6-trinitro- (Musk xylene)	81-15-2	D/P	
25	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride	552-30-7	D	

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26	1,4-Benzenediamine, N,N' -mixed phenyl and tolyl derivs	68953-84-4	D/P	0.1% Any intentionally added content must be reported; no testing required.
27	1,4-Benzenediamine, N,N'-mixed Ph and tolyl and xylyl derivs.	68953-83-3	D	
28	1,4-Benzenediamine, N,N'-mixed tolyl and xylyl derivs.	68478-45-5	D	
29	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	D/P	
30	1,4 Benzenediol (Hydroquinone)	123-31-9	D	
31	Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester	36443-68-2	D	
32	Benzenesulfonic acid, C10-16-alkyl derivs.	68584-22-5	D	
33	Benzenesulfonic acid, C10-16-alkyl derivs, compds. with 2-propanamine	68584-24-7	D	
34	Benzenesulfonic acid,C10-13-alkyl derivs., sodium salts	68411-30-3	D	
35	Benzenesulfonic acid,dodecyl(sulfophenoxy)-, sodium salt (1:2)	28519-02-0	D	
36	Benzenesulfonic acid, oxybis[dodecyl-, disodium salt	25167-32-2	D	
37	Benzenesulfonic acid, [[4-[[4-(phenylamino)phenyl][4-(phenylimino)-2,5-cyclohexadien-1-ylidene]methyl]phenyl]amino]- (Pigment Blue 61)	1324-76-1	D	
38	Benzidine and its salts, all members		P	0.01%, see details for Canada specific

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39	Benzododecinium chloride;	139-07-1	D	
40	Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, 2,4-bis(1,1-dimethylethyl)phenyl ester	4221-80-1	D	
41	Benzophenone	119-61-9	D	
42	Benzothiazole-2-thiol; 2-Mercaptobenzothiazole;	149-30-4	D	
43	2-(2H-Benzotriazol-2-yl)-6-(1-methyl-1-phenylethyl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-928)	73936-91-1	D	
44	2-Benzothiazolesulphenamide, N, N-dicyclohexyl-	4979-32-2	D	Any intentionally added content must be reported
45	2(3H)-Benzothiazolethione,sodium salt (1:1)	2492-26-4	D	
46	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	D/P	
47	2-(2H-benzotriazol-2-yl)-p-cresol (UV-P)	2440-22-4	D	
48	2-Benzyl-2-dimethylamino-4-morpholinobutyrophenone	119313-12-1	D	
49	Beryllium and its compounds, all members		D	
50	Biocidal coatings / biocidal additives, selected		D/P	Any intentionally added content must be reported or is prohibited
51	bis(4-chlorophenyl) sulphone	80-07-9	D	
52	Bis(2-ethylhexyl) tetrabromophthalate; Tetrabromophthalic acid bis(2-ethylhexyl)ester (BEH-TEBP)	26040-51-7	D	
53	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	D	
54	Bis(chloromethyl) ether (BCME)	542-88-1	P	Any intentionally added content is prohibited

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55	2,2-bis(chloromethyl)trimethylene bis(bis(2-chloroethyl)phosphate) (V6)	38051-10-4	D	
56	Bis(α,α-dimethylbenzyl) peroxide	80-43-3	D	
57	Bisphenol & derivates, selected		D	250 ppm, Reference as CLP requirement
58	Boric acid/Orthoboric acid	10043-35-3	D/P	
59	Boric acid/Orthoboric acid	11113-50-1	D/P	
60	Butadiene, 1,3 -	106-99-0	D	
61	Cadmium and its compounds, all members		D/P	- Portable Batteries*: shall not contain more than 0.002 % of cadmium (expressed as cadmium metal) by weight - All Other Applications: 0.01% for impurities, any intentionally added content must be reported. *Portable Batteries: <5kg (Button Cell, AAA, AA, 9v, etc)
62	Chlorinated hydrocarbons, selected		D/P	
63	Chlorinated or brominated Dibenzo-p-dioxins or Dibenzofurans, all members		P	Content above 10 ppb

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64	Chlorinated paraffins, short & medium chain length (SCCP, MCCP), all members: Note that the use of specific CAS numbers for these substances differs throughout the world. Example CAS numbers are provided below; however, other CAS numbers may be used that are not specific to chain length. Therefore, please consult your MSDS and supplier to determine product-specific chain length.		D/P	0.01
65	5-Chlorobenzotriazole, 2-(2-Hydroxy-3-tert-butyl-5-methylphenyl)- (UV-326)	3896-11-5	D	
66	Chromium(VI)-salts, all members		D/P	3mg/kg of chromium VI content in the total dry weight of the leather 0.1% for impurities, any intentionally added content must be reported
67	C.I. Disperse Yellow 3	2832-40-8	D	
68	C.I. Pigment Violet 29 (Perylene-3,4:9,10-tetracarboxydiimide)	81-33-4	D	
69	Cobalt and its compounds, all members		D/P	Cobalt compounds and alloys, excluding cobalt in steels
70	Colophony (Rosin), selected		D	
71	Copper (metallic)	7440-50-8	D/P	• 5 % copper and its compounds by weight (January 1, 2021) • 0.5 % copper and its compounds by weight

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				(January 1, 2025)
72	Critical Raw Materials	See list of substances reported in IMDS: https://public.mdsystem.com/web/imds-public-pages/gadsl-crm	D	1% declaration threshold for existing MDS including all versions prior to March 2022. 0.1% declaration threshold for new MDS created after February 2022
73	Cumene	98-82-8	D	
74	Cyclododecane, hexabromo- (HBCD)		D/P	Any intentionally added content must be reported for Canada. No testing required
75	Cyclohexane-1,2-dicarboxylic anhydride	85-42-7	D	
76	D&C Orange No. 17	3468-63-1	D	
77	Decamethylcyclopentasiloxane	541-02-6	D	
78	Decamethyltetrasiloxane	141-62-8	D	
79	Diamino-diphenylmethane (4,4'-Diaminodiphenylmethane)	101-77-9	D/P	
80	Diazene-1,2-dicarboxamide, Azodicarbonamide (ADCA)	123-77-3	D	

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81	2,3-Dibromo-1-propanol (2,3-DBPA)	96-13-9	D	
82	1,3-diethyl-2-thiourea	105-55-5	D	
83	1,3-dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione	53988-10-6	D	
84	1,3-dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt	61617-00-3	D	
85	2,4-Dihydroxybenzophenone	131-56-6	D	
86	Diisodecyl azelate	28472-97-1	D	
87	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	119344-86-4	D	
88	N-1,3-dimethylbutyl-N'-phenyl-p-phenylenediamine, (6PPD)	793-24-8	D	
89	Dimethylformamide (N,N-Dimethylformamide)	68-12-2	D/P	Shall not be placed on the market textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing. （Concentration limit by weight 0.3%）
90	N,N-Dimethylacetamide	127-19-5	D	

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91	2,4 Dinitrotoluene	121-14-2	D/P	
92	Diorganotin compounds		D/P	0.1% by weight of Tin
93	1,4-Dioxane	123-91-1	D	
94	Disodium octaborate, anhydrous	12008-41-2	D	
95	Disodium octaborate tetrahydrate; Boron sodium oxide (B8Na2O13), tetrahydrate	12280-03-4	D	
96	Disodiumtetraborates, selected		D/P	
97	2,6-di-tert-butyl-p-cresol	128-37-0	D	
98	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	D	
99	6,6'-di-tert-butyl-4,4'-thiodi-m-cresol	96-69-5	D	
100	2,5-di-tert-pentylhydroquinone	79-74-3	D	
101	2,2'-Dithiobis(benzothiazole)	120-78-5	D	
102	Dodecachloropentacyclo 1, 3, 4-Metheno-1H-cyclobuta(cd)pentalene, Mirex	2385-85-5	P	Any intentionally added content is prohibited
103	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1*6,9*.0*2,13*.0*5,10*]octadeca-7,15-diene, all members		P	
104	Dodecamethylcyclohexasiloxane (D6)	540-97-6	D	
105	Dodecamethylpentasiloxane	141-63-9	D	
106	Epichlorohydrin (1-chloro-2,3-epoxypropane)	106-89-8	D	

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107	1,1'-(ethane-1,2-diyl)bis[pentabromobenzene]	84852-53-9	D	
108	Ethane-1,2-diol	107-21-1	D	
109	1,1'-[Ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]; 1,2-Bis(2,4,6-tribromophenoxy)ethane (BTBPE)	37853-59-1	D	
110	Ethanol, 2-(2-methoxyethoxy)-	111-77-3	D	0.1% Any intentionally added content must be reported; no testing required.
111	Ethyl-/ Methyl-glycols and their acetates		D/P	Any known concentration must be reported.
112	Ethylbenzene	100-41-4	D	
113	N,N'-ethylenebis(3,4,5,6-tetrabromophthalimide)	32588-76-4	D	
114	Ethylenediamine	107-15-3	D	
115	Ethylene Glycol Monoethyl Ether Acetate	111-15-9	D	
116	Ethyelenethiourea/Imidazolidine-2-thione	96-45-7	D	
117	Formaldehyde	50-00-0	D/P	Any intentionally added content of formaldehyde must be reported. Formaldehyde in any material, which may be emitted under reasonable and forseeable conditions, must be qualitatively indicated. Impurities of formaldehyde above 0.1 % has to

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				be declared.
118	Formaldehyde, reaction products with branched and linear heptylphenol, carbon disulfide and hydrazine	93925-00-9	D	
119	Glutaral; Glutaraldehyde; Pentane-1,5-dial; Pentanedial	111-30-8	D	
120	Hexachlorobenzene	118-74-1	D/P	Any intentionally added content is prohibited in Canada Japan: ≤ BAT EU: 10ppm
121	Hexachloro-1,3-butadiene (HCBD)	87-68-3	P	Any intentionally added content is prohibited
122	Hexachlorocyclohexane, gamma isomer, Lindane	58-89-9	P	
123	Hexahydromethylphthalic-anhydride	25550-51-0	D	
124	Hexamethyldisiloxane	107-46-0	D	
125	2-Hexyldecan-1-ol	2425-77-6	D	
126	Hydrazine	302-01-2	D	

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127	Hydrobromofluorocarbons (HBFC's), all members		P	
128	Hydrochlorofluorocarbons (HCFC's), all members		D/P	
129	Hydrofluorocarbons (HFC's), saturated, all members		D/P	
130	Indium tin oxide (ITO)	50926-11-9	D	
131	1,1'-(isopropylidene)bis[3,5-dibromo-4-(2,3-dibromopropoxy)benzene]	21850-44-2	D	
132	1,1'-(isopropylidene)bis[3,5-dibromo-4-(2,3-dibromo-2-methylpropoxy)benzene]	97416-84-7	D	
133	Isodecyl diphenyl phosphate	29761-21-5	D	
134	Isopropylphenyl phosphate	68937-41-7	D	
135	Lead and its compounds, all members		D/P	- Portable Batteries*: shall not contain more than 0.01 % of lead (expressed as lead metal) by weight but shall not apply to portable zinc-air button cells until 18 August 2028 - All Other Applications: 0.1% for impurities, any intentionally added content must be reported. *Portable Batteries: <5kg (Button Cell, AAA, AA, 9v, etc)

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136	Melamine	108-78-1	D	
137	Mercury and its compounds, all members		D/P	- Batteries: shall not contain more than 0.0005 % of mercury (expressed as mercury metal) by weight - All Other Applications: 0.1% for impurities, any intentionally added content must be reported
138	Methanol	67-56-1	D/P	0.6% in windscreen washing or defrosting fluids
139	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	D	
140	4-Methylcyclohexyl-1,6-dicarboxylic acid anhydride	19438-60-9	D	
141	2,2'-[(1-methylethylidene)bis[(2,6-dibromo-4,1-phenylene)oxymethylene]]bisoxirane (TBBPA-bG)	3072-84-2	D	
142	Methyloxirane	75-56-9	D	
143	alpha-Methylstyrene	98-83-9	D	

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144	Mineral fibers (Natural or Synthetic), all members except: - Non-respirable fibers - Fibers with low biopersistence		D	Fibers or fibrils that: 1. exceed biopersistence limits (i.e. don't fall under Nota Q of Reg. (EC) No 1272/2008 (CLP) and, 2. are considered respirable (i.e. not continuous filament or not falling under Nota R of EU-D 1272/2008 (CLP) and, 3. have a fibre diameter of 3 microns or less, and a length of 5 micron or more, with a length:diameter ratio equal to or greater than 3:1 (WHO definition)
145	Miristalkonium chloride;	139-08-2	D	
146	Molybdenum trioxide	1313-27-5	D	
147	Monomethyldibromodiphenylmethane	99688-47-8	P	
148	Monomethyldichlorodiphenylmethane	81161-70-8	P	
149	Monomethyltetrachlorodiphenylmethane	76253-60-6	P	
150	Naphthalenedisulfonic acid, dinonyl-	60223-95-2	D	
151	Naphthalenesulfonicacid, dinonyl-, calcium salt (2:1)	57855-77-3	D	
152	Naphthalenesulfonicacid, dinonyl-	25322-17-2	D	
153	2-Naphthylamine and its salts, all members		P	0.01%
154	N-1-naphthylaniline	90-30-2	D	

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155	Nickel and its compounds, all members		D/P	
156	Nitrites, all members		D/P	
157	4-Nitrobiphenyl and its salts, all members		P	0.01%
158	Nitrocellulose	9004-70-0	D	
159	N-Nitrosamines, selected		D/P	
160	4-Nonylphenol, branched and linear, all members		D	
161	Nonylphenol	25154-52-3	D	
162	4-Nonylphenol, branched and linear, ethoxylated, all members		D/P	
163	O,O,O-triphenyl phosphorothioate	597-82-0	D	
164	Octadecanamine	124-30-1	D	
165	Octamethylcyclotetrasiloxane	556-67-2	D	
166	Octamethyltrisiloxane	107-51-7	D	
167	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol		D	
168	4,4'-oxydianiline	101-80-4	D	
169	Ozone depleting halogenated Hydrocarbons and Carbons, all members		P	Any intentionally added content must be reported
170	Pentachlorobenzene	608-93-5	P	Any intentionally added content is prohibited

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171	Pentachlorophenol (PCP) and its salts and esters, all members		P	5ppm
172	Perchlorates, all members		D/P	
173	Per and Poly- fluoroalkyl substances (PFAS), as identified in rows 174 to 190.			
174	Perfluorobutane sulfonic acid (PFBS) and its salts, all members		D	
175	PFHxA, Undecafluorohexanoic acid, its salts and PFHxA related substances, all members, identified in rows 176 to 177.			
176	PFHxA and its salts		D	25 ppb, except for fluoropolymers 500 ppm in fluoropolymers
177	PFHxA related substances		D	1,000 ppb, except for fluoropolymers 2,500 ppm in fluoropolymers
178	PFOA, perfluorooctanoic acid, its salts and PFOA related compounds, all members, identified in rows 179 to 181.		P	For Norway P at 1µg/m2 in textiles, carpets and coated products; Reg. (EC) No 2019/1021 and 2020/784: 0.025 mg/kg for PFOA including its salts, 1 mg/kg for the individual PFOA-related compounds or a combination of those compounds.
179	PFOA and its salts		P	25ppb
180	PFOA Related Compounds		P	1,000 ppb
181	Other PFOA Related Compounds		P	1,000 ppb

*In case of find any problem such as , out of spec. quality, M/C break down, please inform leader and supervisor immediately./ ในกรณีการปฏิบัติงานมีปัญหาเกิดขึ้น เช่น คุณภาพไม่ได้มาตรฐาน เครื่องจักรเสีย ให้รายงานหัวหน้าทันที	MR ผู้แทนฝ่ายบริหาร	Approved by ผู้อนุมัติ	Checked by ผู้ตรวจสอบ	Prepared by ผู้จัดทำ
	Thunwarut	Thunwarut	Taweepoom	Taweepoom

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182	PFCAs (C9-C14), Linear and branched perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain, their salts and related substances, all members, identified in rows 183 to 184.			Please see REACH Annex XVII Restriction No.68 for details on exemptions.
183	PFCAs (C9-C14) and their salts		P	25 ppb
184	PFCAs (C9-C14) related substances		P	260 ppb
185	PFOS, Perfluorooctane sulfonates C8F17SO2X (X = OH, Metal salt, halide, amide, and other derivatives including polymers), all members		P	
186	PFHxS, Perfluorohexane-1-sulphonic acid and its salts and PFHxS Related Substances, all members, identified in rows 187 to 188.			
187	PFHxS and its salts		P	
188	PFHxS related substances		P	
189	PFHpA, Perfluoroheptanoic acid and its salts, all members		D	Any intentionally added content and degradation byproducts must be reported

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190	Other PFAS Substances, all members (Includes substances taken from a series of government regulatory lists and compared to (major market) country inventories to obtain a list of commercially available PFAS substances not listed in other PFAS substance groups)	(Note: Some substances do not have CAS RNs. The US EPA/TSCA Accession Number will be shown as the identifier where available.)	D	Any intentionally added content and degradation byproducts must be reported
191	Phenol	108-95-2	D	
192	Phenol, 2,4-bis(1,1-dimethylethyl)-	96-76-4	D	
193	Phenol, 2,6-bis(1,1-dimethylethyl)-	128-39-2	D	
194	Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)- (UV 320)	3846-71-7	P	
195	Phenol, 2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)- (UV-234)	70321-86-7	D	
196	Phenol, 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)- (UV 329)	3147-75-9	D	
197	Phenol, 2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)-6-(1-methylpropyl)- (UV 350)	36437-37-3	D/P	

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198	Phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1'-dimethylethyl)- (UV 327)	3864-99-1	D/P	Any intentionally added content must be reported
199	Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene	68610-51-5	D	
200	Phenol, 4,4',4''-(1-methyl-1-propanyl-3-ylidene)tris[2-(1,1-dimethylethyl)-5-methyl-	1843-03-4	D	
201	Phenol, 4,4'-methylenebis[2,6-bis(1,1-dimethylethyl)-	118-82-1	D	
202	Phenol, styrenated	61788-44-1	D	
203	Phenol, 4-(1,1,3,3-tetramethylbutyl)-	140-66-9	D	
204	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated, all members		D/P	
205	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	D	
206	Phenol, 2,4,6-tris(1,1-dimethylethyl)-	732-26-3	D/P	
207	Phenylendiamines and its salts, selected		D	
208	Phenyl Glycidyl Ether	122-60-1	D	
209	Phosphoric acid, bis[(1,1-dimethylethyl)phenyl] phenyl ester	65652-41-7	D	
210	Phosphoric acid,(1,1-dimethylethyl)phenyl diphenyl ester	56803-37-3	D	
211	Phosphoric acid, triethyl ester, TEP	78-40-0	D	

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212	Phosphoric acid, tris(2-methylphenyl) ester	78-30-8	D	
213	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-propyl) esters, zinc salts	84605-29-8	D	
214	Phosphorodithioic acid,mixed O,O-bis(2-ethylhexyl and iso-butyl and iso-propyl) esters, zinc salts	85940-28-9	D	
215	Phosphorodithioic acid,mixed O,O-bis(iso-butyl and pentyl) esters, zinc salts	68457-79-4	D	
216	Phosphorodithioic acid, mixed O,O-bis(sec-butyl and isooctyl) esters, zinc salts	113706-15-3	D	
217	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	D	
218	Phthalates, selected		D/P	
219	Pitch, coal tar, high temp.	65996-93-2	D/P	
220	Polyamine Curing Agents, selected		D	
221	Polybrominated biphenyls (PBB), all members		P	

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222	Polybrominated diphenyl ethers (PBDE),all members		D/P	0.05% for tetra-, penta-, hexa-, hepta- and deca-BDE and the sum of them 0.1% for each of the other entries, and for tetra-, penta-, hexa-, hepta- and deca-BDE in electronic equipment
223	Polybrominated terphenyls (PBT), all members		D	
224	Polychlorinated biphenyls (PCB), all members		P	0.0002%
225	Polychlorinated naphthalenes, all members		P	Any intentionally added content must be reported
226	Polychlorinated terphenyls (PCT), all members		P	EU: 0.005% in substances or mixtures Canada: no intentional addition

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227	Polycyclic aromatic hydrocarbons (PAH; PCAH), selected		D/P	EC 552/2009 and 2015/326 (REACH Annex XVII, entry 50, paragraph 1-4), Extender oils used in tyre manufacturing process < 10 mg/kg of 8 REACH PAH or, polycyclic aromatics (PCA) < 3 %(w/w) tested with EN 16143:2013 in extender oils or in vulcanised rubber compounds < 0.35 % Bay protons tested with ISO 21461. EC 1272/2013 Polycyclic aromatic hydrocarbons (REACH Annex XVII, entry 50, paragraph 5-8), Rubber and plastic article in contact with skin < 1 mg/kg for any of the 8 REACH PAH. EC 2018/1513 Substances listed in Appendix 12 (REACH Annex XVII, entry 72), textiles other than clothing in contact with skin. GB/T 30512 (China): Under discussion
228	1,3-Propanesultone	1120-71-4	D	
229	2-Propanone, reaction products with diphenylamine (PREPOD)	68412-48-6	D	Any intentionally added content must be reported
230	Pyrrolidones, selected		D/P	
231	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides; Alkyl (C12-16) dimethylbenzyl ammonium chloride; C12-16-ADBAC;	68424-85-1	D	

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232	Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides, compds. with bentonite	71011-24-0	D	
233	Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides, compds. with hectorite	71011-26-2	D	
234	Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, chlorides;	61789-80-8	D	
235	Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	D	
236	Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides	61789-77-3	D	
237	Quinoline	91-22-5	D	
238	Resin acids and Rosin acids, calcium salts	9007-13-0	D	
239	Resin acids and Rosin acids, sodium salts	61790-51-0	D	

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240	Resin acids and Rosin acids, hydrogenated, esters with pentaerythritol	64365-17-9	D	
241	Resin acids and Rosin acids, hydrogenated, esters with glycerol	65997-13-9	D	
242	Resin acids and Rosin acids, hydrogenated, methyl esters	8050-15-5	D	
243	Radioactive substances (including scrap metal contaminants), all members		D	Above background radiation
244	Selenium and its compounds, all members		D/P	
245	Silica, crystalline	14808-60-7	D	Any intentionally added content must be reported
246	Sodium azide	26628-22-8	D	
247	Styrene (Vinyl benzene)	100-42-5	D	
248	Styrene oxide (Epoxy styrene)	96-09-3	D	
249	Sulfonic acids, C10-18-alkane, phenyl esters	70775-94-9	D	
250	Sulfonic acids, petroleum, calcium salts, overbased	68783-96-0	D	
251	Sulfonic acids, petroleum, barium salts	61790-48-5	D	
252	Sulfonic acids, petroleum, calcium salts	61789-86-4	D	

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253	Sulfonic acids, petroleum, magnesium salts	61789-87-5	D	
254	Sulfonic acids, petroleum, sodium salts	68608-26-4	D	
255	4,4'-sulphonylbis[2,6-dibromophenol],Tetrabromobisphenol S, (TBBPS)	39635-79-5	D	
256	Sulfur hexafluoride	2551-62-4	D/P	
257	Tall Oil	8002-26-4	D	
258	Tall oil pitch	8016-81-7	D	
259	Terphenyl, hydrogenated	61788-32-7	D	
260	4-tert-Butylphenol	98-54-4	D	
261	1,4,5,8-tetraaminoanthraquinone; C.I. Disperse Blue 1	2475-45-8	D/P	Shall not be placed on the market textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing. （Concentration limit by weight 0.005%）
262	Tetrabromobisphenol A (TBBPA)	79-94-7	D	

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263	2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane and 2,4,6-tribromophenol	158725-44-1	D	
264	2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	40039-93-8	D	
265	Tetrachlorobenzene, all members		P	Any intentionally added content is prohibited
266	Tetrafluoro-methane	75-73-0	D/P	
267	N,N,N',N'-Tetramethyl-4,4'-methylenedianiline	101-61-1	D	
268	Tetraphenyl m-phenylene bis(phosphate)	57583-54-7	D	
269	Thallium	7440-28-0	D	
270	Thioperoxydicarbonic diamide ([(H2N)C(S)]2S2), tetramethyl-; Thiram; Tetramethylthiuram disulphide;	137-26-8	D/P	
271	Thiourea; thiocarbamide	62-56-6	D	
272	Toluene	108-88-3	D	
273	2,4,6-Triallyloxy-1,3,5-triazine	101-37-1	D	
274	Trichlorophenol and its salts, all members		D	

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275	Trichloropropane (1,2,3 - Trichloropropane)	96-18-4	D	
276	S-(tricyclo(5.2.1.02,6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8	D	
277	Trimethylphosphate	512-56-1	D	
278	Triorganotin compounds, all members		P	
279	Triphenylphosphate	115-86-6	D	
280	1,3,5-Tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	2451-62-9	D	
281	Tris(1,3-dichloro-2-propyl)phosphate	13674-87-8	D	
282	Tris-(1-aziridinyl) phosphine oxide	545-55-1	P	
283	Tris(2-chloro-1-methylethyl) phosphate	13674-84-5	D	
284	Tris(2,3-dibromopropyl)phosphate (TRIS)	126-72-7	P	
285	Tris(2-chloroethyl)phosphate	115-96-8	D/P	
286	Tris(2-ethylhexyl)-benzene-1,2,4-tricarboxylate	3319-31-1	D	
287	Tris(methylphenyl) phosphate	1330-78-5	D	
288	Tris(nonylphenyl) phosphite (TNPP)	26523-78-4	D	
289	Trixylyl phosphate	25155-23-1	D/P	
290	UVCB-Diamines, all members		D	

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290	Amines, N-C16-18-alkyl (evennumbered) propane-1,3-diamine	133779-11-0	D	
291	Vanadium pentoxide (orthorhombic crystalline form)	1314-62-1	D	
292	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	4259-15-8	D	

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อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)

ถุงมือผ้า	ที่อุดหู	หมวกนิรภัย	ผ้าปิดจมูก	กระบังหน้ากันสะเก็ด	ปลอกยางสวมนิ้ว
ถุงมือยาง	ที่ครอบหู	รองเท้านิรภัย	หน้ากากกรองสารเคมี	แว่นตากันสะเก็ด	เข็มขัดพยุงหลัง
		ปลอกแขน	กระบังหน้ากรองแสง	เข็มขัดนิรภัย	เอี๊ยม

ตารางที่ 4 เป็นสารเคมีที่ต้องควบคุมในกระบวนการผลิต

No.	*Substance*	*CAS. No.*	*Rank*
1.	CFC	-	A
2.	Halon	-	A
3.	Carbon tetrachloride	56-23-5	A
4.	1,1,1-Trichloroethane	71-55-6	A
5.	HCFCs	-	A
6.	HBFCs	-	A
7.	Bromochloromethane	74-97-5	A
8.	Methyl bromide	74-83-9	A
9.	Asbestos	-	A
10.	Polychlorinated biphenyls (PCB)	-	A
11.	Polychlorinated naphthalene (2 or more chlorine atoms)	-	A
12.	Hexachlorobenzene	118-74-1	A
13.	Aldrin	309-00-2	A
14.	Dieldrin	60-57-1	A
15.	Endrin	72-20-8	A

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16.	DDT	50-29-3	A
17.	Chlordane	57-74-9	A
18.	Heptachlor	76-44-8	A
19.	Toxaphene	8001-35-2	A
20.	Mirex	2385-85-5	A
21.	Hexachlorobutadiene	87-68-3	A
22.	Perfluorooctane sulfonic acid (PFOS) and its salts [a)] Perfluorooctane sulfonyl fluoride (PFOSF)	-	A
23.	Pentachlorobenzene	608-93-5	A
24.	Alpha hexachlorocyclohexane	319-84-6	A
25.	Beta hexachlorocyclohexane	319-85-7	A
26.	Lindane	58-89-9	A
27.	Chlordecone	143-50-0	A
28.	Hexabromobiphenyl	36555-01-8	A
29.	Tetrabromodiphenyl ether and pentabromodiphenyl ether	-	A
30.	Hexabromodipheyl ether and heptabromodiphenyl ether	-	A
31.	Technical endosulfan and its related isomers	115-29-7 959-98-8 33213-65-9	A

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32.	Hexabromocyclododecane	25637-99-4 3194-55-6 4736-49-6 65701-47-5 134237-50-6 134237-51-7 134237-52-8 138257-17-7 138257-18-8 138257-19-9 169102-57-2 678970-15-5 678970-16-6 687970-17-7	A
33.	Pentachlorophenol and its salts and esters.	-	A
34.	Short-chain chlorinated paraffins (Alkanes, C10-13, chloro) : straight-chain chlorinatedfd hydrocarbon with chain lengths from C10 to C13 and a content of chlorine greater than 48 percent by weight.	85535-84-8 68920-70-7 71011-12-6 85536-22-7 85681-73-8 108171-26-2	A
35.	Decabromodiphenyl ether (commerial mixture, c-decaBDE)	1163-19-5	A

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(3)	Carbon tetrachloride[a)]	56-23-5	A
36	Dicofol	115-32-2,10606-46-9	A
37	Perfluorooctanoic acid(PFOA), its salts and PFOA-related compounds		A
38	1,2-Dichloroethane	107-06-2	A
39	Vinylidene (di) chloride	75-35-4	A
40	1,2-Dichloroethylene	540-59-0 156-59-2 156-60-5	A
41	1,3-dichloropropene	542-75-6	A
42	Dichloromethane	75-09-2	A
43	Tetrachloroethylene	127-18-4	A
(4)	1,1,1-Trichloroethane[a)]	71-55-6	A
44	1,1,2-Trichloroethane	79-00-5	A
45	Trichloroethylene	79-01-6	A
46	Benzene	71-43-2	A
47	Chloroethylene[b)]	75-01-4	A
48	Tetraphosphorus	-	A
49	Benzidine and its salt.	-	A

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50	4-Aminobiphenyl and its salt.	-	A
51	4-Nitrobiphenyl and its salt.	-	A
52	Bis(chloromethyl) ether	-	A
53	β-Naphthylamine and its salt	-	A
54	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds	-	A
55	Methoxychlor	72-43-5 30667-99-3 76733-77-2 255065-25-9 255065-26-0 59424-81-6 1348358-72-4	A
56	Dechlorane Plus	13560-89-9 135821-74-8 135821-03-3	A
57	UV-328	25973-55-1	A

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YAMAGATA (THAILAND) Co., Ltd. A member of YAMAGATA Group — Work Instruction	Doc. No. WI-ES-13	Doc. Name : Hazardous Chemical Substances Standard Control		DAR. No. / เลขที่ DAR 099/25	Eff. Date/วันที่มีผลบังคับใช้ 19-Nov-2025	
Process Name /ชื่อขั้นตอน : **ควบคุมสารเคมีอันตราย ใน วัตถดิบ/ ผลิตภัณฑ์ / บรรจภัณฑ์**	Prod. Name/ชื่อสินค้า All	Special Characteristic/ คุณลักษณะพิเศษ	-	Ref. เอกสารอ้างอิง ข้อกำหนดลูกค้า , RoHS, SVHC ,GADSL	Rev . 37	Page หน้า 130/130
Prod. No./หมายเลขสินค้า -	Customer/ชื่อลูกค้า -					

อุปกรณ์ป้องกันอันตรายส่วนบุคคล (PPE)

○ ถุงมือผ้า	○ ที่อุดหู	○ หมวกนิรภัย	○ ผ้าปิดจมูก	○ กระบังหน้ากันสะเก็ด	○ ปลอกยางสวมนิ้ว
○ ถุงมือยาง	○ ที่ครอบหู	○ รองเท้านิรภัย	○ หน้ากากกรองสารเคมี	○ แว่นตากันสะเก็ด	○ เข็มขัดพยุงหลัง
		○ ปลอกแขน	○ กระบังหน้ากรองแสง	○ เข็มขัดนิรภัย	○ เอี๊ยม

*In case of find any problem such as , out of spec. quality, M/C break down, please inform leader and supervisor immediately./ ในกรณีการปฏิบัติงานมีปัญหาเกิดขึ้น เช่น คุณภาพไม่ได้มาตรฐาน เครื่องจักรเสีย ให้รายงานหัวหน้าทันที	MR ผู้แทนฝ่ายบริหาร	Approved by ผู้อนุมัติ	Checked by ผู้ตรวจสอบ	Prepared by ผู้จัดทำ
	Thunwarut	Thunwarut	Taweepoom	Taweepoom

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